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**SITE INVESTIGATION
INSTALLATION RESTORATION
PROGRAM (IRP)
SITE NO.4 AND SITE NO.5
VOLUME II
APPENDICES A-H**

**216th ENGINEERING INSTALLATION SQUADRON
& 234th COMBAT COMMUNICATIONS SQUADRON
CALIFORNIA AIR NATIONAL GUARD
HAYWARD AIR NATIONAL GUARD STATION
HAYWARD, CALIFORNIA
MARCH 1996**



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Prepared For
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REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
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1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE March 1996		3. REPORT TYPE AND DATES COVERED Site Investigation Report
4. TITLE AND SUBTITLE Site Investigation Report for IRP Site No. 4 and No. 5, California Air National Guard, 216th EIS & 234th CCS, Hayward Air National Guard Station, Hayward, CA - Volume II			5. FUNDING NUMBERS	
6. AUTHOR(S) NA				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Operational Technologies Corp. 4100 N.W. Loop 410, Suite 230 San Antonio, TX 78229-4253			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) ANG/CEVR 3500 Fetchet Avenue Andrews AFB MD 20762-5157			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
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12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) Site Investigation Report for IRP Site No. 4 and 5, California Air National Guard, 216th EIS & 234th CCS, Hayward Air National Guard Station, Hayward, CA - Volume II. This is the second volume of a two volume site investigation report. The sites were investigated under the Installation Restoration Program. Soil and groundwater samples were collected and analyzed. Further investigation was recommended to further delineate the impacted soil and groundwater, conduct a risk assessment, and continue groundwater monitoring. Volume II contains the analytical data, boring logs, and QA/QC sheets.				
14. SUBJECT TERMS Installation Restoration Program; Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); Air National Guard; Site Investigation, California Air National Guard; Hayward, California			15. NUMBER OF PAGES 356	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT None	

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Block 2. Report Date. Full publication date including day, month, and year, if available (e.g. 1 Jan 88). Must cite at least the year.

Block 3. Type of Report and Dates Covered. State whether report is interim, final, etc. If applicable, enter inclusive report dates (e.g. 10 Jun 87 - 30 Jun 88).

Block 4. Title and Subtitle. A title is taken from the part of the report that provides the most meaningful and complete information. When a report is prepared in more than one volume, repeat the primary title, add volume number, and include subtitle for the specific volume. On classified documents enter the title classification in parentheses.

Block 5. Funding Numbers. To include contract and grant numbers; may include program element number(s), project number(s), task number(s), and work unit number(s). Use the following labels:

C - Contract	PR - Project
G - Grant	TA - Task
PE - Program Element	WU - Work Unit Accession No.

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Block 9. Sponsoring/Monitoring Agency Name(s) and Address(es). Self-explanatory.

Block 10. Sponsoring/Monitoring Agency Report Number. (If known)

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DOD - See DoDD 5230.24, "Distribution Statements on Technical Documents."

DOE - See authorities.

NASA - See Handbook NHB 2200.2.

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**SITE INVESTIGATION
INSTALLATION RESTORATION
PROGRAM (IRP)
SITE NO.4 AND SITE NO.5**

**VOLUME II
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**216th ENGINEERING INSTALLATION SQUADRON
& 234th COMBAT COMMUNICATIONS SQUADRON
CALIFORNIA AIR NATIONAL GUARD
HAYWARD AIR NATIONAL GUARD STATION
HAYWARD, CALIFORNIA**

MARCH 1996

Prepared For
**HQ ANG/CEVR
ANDREWS AFB, MARYLAND**

Prepared By
**Operational Technologies Corporation
4100 N.W. Loop 410, Suite 230
San Antonio, Texas 78229-4253
(210) 731-0000**

APPENDIX A

SOIL VAPOR SURVEY RESULTS



**TRANSGLOBAL
ENVIRONMENTAL
GEOCHEMISTRY, INC.**

August 19, 1994

Mr. John Morris
Operational Technologies
4100 NW Loop 410, Suite 230
San Antonio, TX 78229-4253

**SUBJECT: DATA REPORT - Operational Technologies Project #1315-117-115
Soil Vapor Analyses - Air National Guard, Hayward, California**

TEG Project # 940725C

Mr. Morris:

Please find enclosed a data report for the samples analyzed from the above referenced project for Operational Technologies. The samples were analyzed on site in TEG's mobile laboratory. TEG conducted a total of 79 analyses on 42 soil vapor samples.

- 35 analyses on soil vapor for aromatic volatile hydrocarbons by EPA method 8020.
- 44 analyses on soil vapor for total petroleum hydrocarbons by EPA method 8015mod.

The results of the analyses are summarized in the enclosed tables. Applicable detection limits and continuing calibration data are included in the tables.

TEG appreciates the opportunity to have provided analytical and soil vapor services to Operational Technologies on this project. If you have any further questions relating to these data or report, please do not hesitate to contact us.

Sincerely,

Mark Jerpbak
Director, TEG-Northern California



OPERATIONAL TECHNOLOGIES
Project #1315-117-115
Air National Guard - Hayward, California

TEG PROJECT #940725C

BTEX (EPA 8020) & TPH (EPA mod8015) ANALYSES OF SOIL VAPOR in ppmV

SAMPLE NUMBER	DATE SAMPLED	DATE ANALYZED	TPH ppmV	BENZENE ppmV	TOLUENE ppmV	ETHYLBENZ ppmV	XYLENES ppmV
BLANK	7/25/94	7/25/94	nd	nd	nd	nd	nd
BLANK	7/26/94	7/26/94	nd	nd	nd	nd	nd
SOV 5-01-5'	7/25/94	7/25/94	244	11.04	0.08	nd	0.07
SOV 5-01-10'	7/25/94	7/25/94	1695	44.36	nd	nd	nd
SOV 5-02-5'	7/25/94	7/25/94	16	0.36	nd	nd	nd
SOV 5-02-10'	7/25/94	7/25/94	889	33.57	nd	nd	0.50
SOV 5-03-5'	7/25/94	7/25/94	207	0.18	0.44	nd	nd
SOV 5-03-10'	7/25/94	7/25/94	119	nd	nd	nd	nd
SOV 5-04-5'	7/25/94	7/25/94	36	nd	nd	nd	nd
SOV 5-04-10'	7/25/94	7/25/94	18	nd	nd	nd	nd
SOV 5-05-5'	7/25/94	7/25/94	1985	1.53	0.98	nd	nd
SOV 5-05-10'	7/25/94	7/25/94	551	6.16	nd	nd	nd
SOV 5-06-5'	7/25/94	7/25/94	48	0.45	nd	nd	nd
SOV 5-06-10'	7/25/94	7/25/94	2586	2.19	3.17	nd	nd
SOV 5-07-5'	7/25/94	7/25/94	2316	36.66	nd	nd	nd
SOV 5-07-10'	7/25/94	7/25/94	17700	126.38	nd	0.46	1.42
SOV 5-08-5'	7/25/94	7/25/94	1435	6.61	nd	nd	nd
SOV 5-08-10'	7/25/94	7/25/94	45340	391.93	9.55	1.38	1.61
SOV 5-09-5'	7/25/94	7/25/94	4144	107.37	10.98	nd	3.68
SOV 5-09-10'	7/25/94	7/25/94	16800	113.49	2.80	3.58	2.77
SOV 5-10-5'	7/26/94	7/26/94	24	0.13	0.64	nd	nd
SOV 5-10a-10'	7/26/94	7/26/94	124	0.30	nd	nd	nd
SOV 5-11-5'	7/26/94	7/26/94	295	0.35	0.07	nd	0.13

REPORTING LIMITS - parts per million by volume (ppmV)	1	0.01	0.01	0.01	0.01
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'nd' INDICATES NOT DETECTED AT LISTED REPORTING LIMITS.

'- ' INDICATES ANALYSIS NOT REQUESTED

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB

ANALYSES PERFORMED BY: Mr. Leif Jonsson

DATA REVIEWED BY: Mr. Mark Jerpbak

Mark Jerpbak 8-19-94

page 1

Transglobal Environmental Geochemistry

PO Box 162580, Sacramento, CA 95816

Phone: (916) 736-3233

Fax: (916) 452-5806



OPERATIONAL TECHNOLOGIES
Project #1315-117-115
Air National Guard - Hayward, California

TEG PROJECT #940725C

BTEX (EPA 8020) & TPH (EPA mod8015) ANALYSES OF SOIL VAPOR in ppmV

SAMPLE NUMBER	DATE SAMPLED	DATE ANALYZED	TPH ppmV	BENZENE ppmV	TOLUENE ppmV	ETHYLBENZ ppmV	XYLENES ppmV
SOV 5-11-10'	7/26/94	7/26/94	5538	38.62	nd	nd	nd
SOV 5-16-10'	7/26/94	7/26/94	9200	—	—	—	—
SOV 5-17-10'	7/26/94	7/26/94	26200	79.26	46.97	3.00	1.09
SOV 5-18-10'	7/26/94	7/26/94	15655	353.34	103.71	20.34	33.29
SOV 5-19-10'	7/26/94	7/26/94	13830	202.77	4.58	nd	0.20
SOV 5-20-10'	7/26/94	7/26/94	16900	42.45	nd	nd	7.19
SOV 5-21-10'	7/26/94	7/26/94	8362	37.74	51.71	8.81	7.19
SOV 5-23-10'	7/26/94	7/26/94	11140	91.86	25.03	nd	12.18
SOV 5-24-10'	7/26/94	7/26/94	27500	285.46	85.29	5.45	18.74
SOV 5-25-10'	7/26/94	7/26/94	3941	103.34	1.73	2.00	1.05
SOV 5-26-10'	7/26/94	7/26/94	9256	117.94	72.21	10.80	23.71
SOV 5-27-10'	7/26/94	7/26/94	7284	12.63	30.43	4.43	7.62
SOV 5-28-10'	7/26/94	7/26/94	7528	—	—	—	—
SOV 5-29-10'	7/26/94	7/26/94	2063	—	—	—	—
SOV 5-29-10' DUP	7/26/94	7/26/94	2126	—	—	—	—
SOV 5-30-10'	7/26/94	7/26/94	39	0.06	0.03	nd	nd
SOV 5-30-10' DUP	7/26/94	7/26/94	35	0.07	0.04	nd	nd
SOV 5-31-10'	7/26/94	7/26/94	14730	59.47	57.79	8.72	25.02
SOV 5-32-10'	7/26/94	7/26/94	2783	—	—	—	—
SOV 5-33-10'	7/26/94	7/26/94	955	—	—	—	—
SOV 5-34-10'	7/26/94	7/26/94	8330	—	—	—	—
SOV 5-35-10'	7/26/94	7/26/94	5490	—	—	—	—
SOV 5-36-10'	7/26/94	7/26/94	2620	—	—	—	—

REPORTING LIMITS - parts per million by volume (ppmV)	1	0.01	0.01	0.01	0.01
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'nd' INDICATES NOT DETECTED AT LISTED REPORTING LIMITS.

'—' INDICATES ANALYSIS NOT REQUESTED

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB

ANALYSES PERFORMED BY: Mr. Leif Jonsson

DATA REVIEWED BY: Mr. Mark Jerpbak

MLJ 8-19-94

page 2

Transglobal Environmental Geochemistry

PO Box 162580, Sacramento, CA 95816 Phone: (916) 736-3233 Fax: (916) 452-5806



OPERATIONAL TECHNOLOGIES
Project #1315-117-115
Air National Guard - Hayward, California

TEG PROJECT #940725C

CALIBRATION DATA - Area Counts

	BENZENE	TOLUENE	ETHYLBENZ	XYLENES	TPH
Average RF - Midpoint	80.6	80.9	63.6	253.5	2112

Continuing Calibration

7/25/94	84.1 104.4%	77.0 95.2%	62.7 98.6%	244.1 96.3%	2119 100.3%
7/25/94	72.3 89.7%	75.3 93.1%	58.3 91.7%	250.5 98.8%	2062 97.6%
7/26/94	71.6 88.8%	81.5 100.7%	55.8 87.7%	253.9 100.2%	2352 111.4%
7/26/94	73.6 91.3%	76.4 94.4%	58.2 91.5%	249.5 98.4%	1827 86.5%

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB

ANALYSES PERFORMED BY: Mr. Leif Jonsson

DATA REVIEWED BY: Mr. Mark Jerpbak

Mark Jerpbak 8-19-94

Transglobal Environmental Geochemistry

PO Box 162580, Sacramento, CA 95816 Phone: (916) 736-3233 Fax: (916) 452-5806

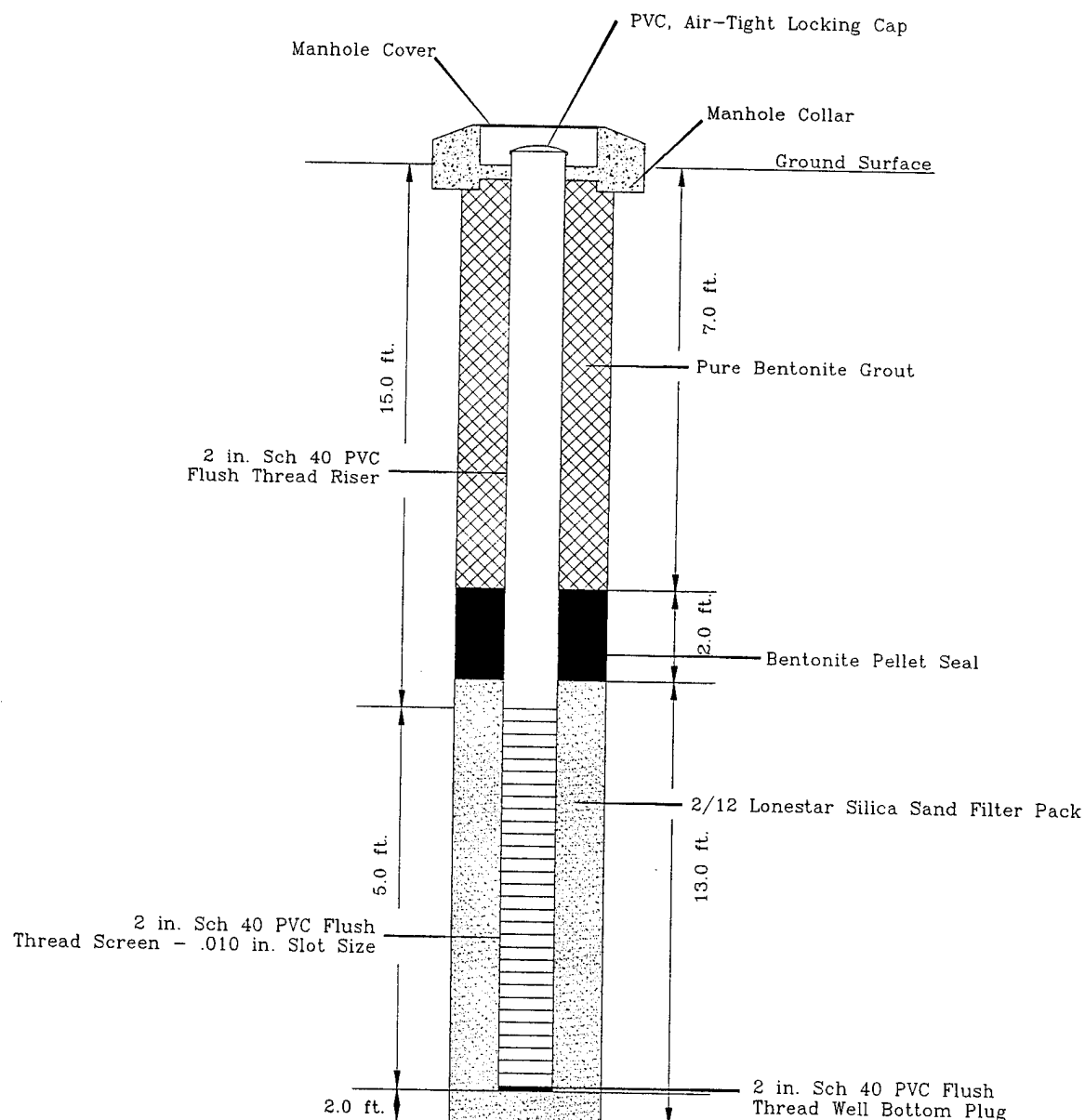
APPENDIX B

WELL CONSTRUCTION LOGS

SECTION B.1 INTRODUCTION

Well construction logs have been completed for each piezometer and monitoring well installed as part of the investigation at IRP Sites No. 4 and No. 5. Diagrams are presented in numerical order. The diagrams include water level data and well construction information for each individual well. Well construction information includes an outline of the wellbore, depth of the borehole, the screened interval, and the sand pack and bentonite seal interval.

Project: <u>HAYWARD ANG3</u>	Date Installed: <u>7/27/94</u>
Town/City: <u>HAYWARD</u>	Drilling Contractor: <u>TONTO DRILLING</u>
County: <u>ALAMEDA</u> State: <u>CALIFORNIA</u>	Drilling Method: <u>HOLLOW-STEM AUGER</u>
TOC Elev: <u>27.99 Ft.</u>	Borehole Diameter: <u>2 INCH</u>
Ground Elev.: <u>28.22 Ft.</u>	Development Technique: <u>NA</u>
Water Level: <u>17.46 Ft. Below TOC</u>	
Total Well Depth: <u>22.00 Ft.</u>	Not To Scale



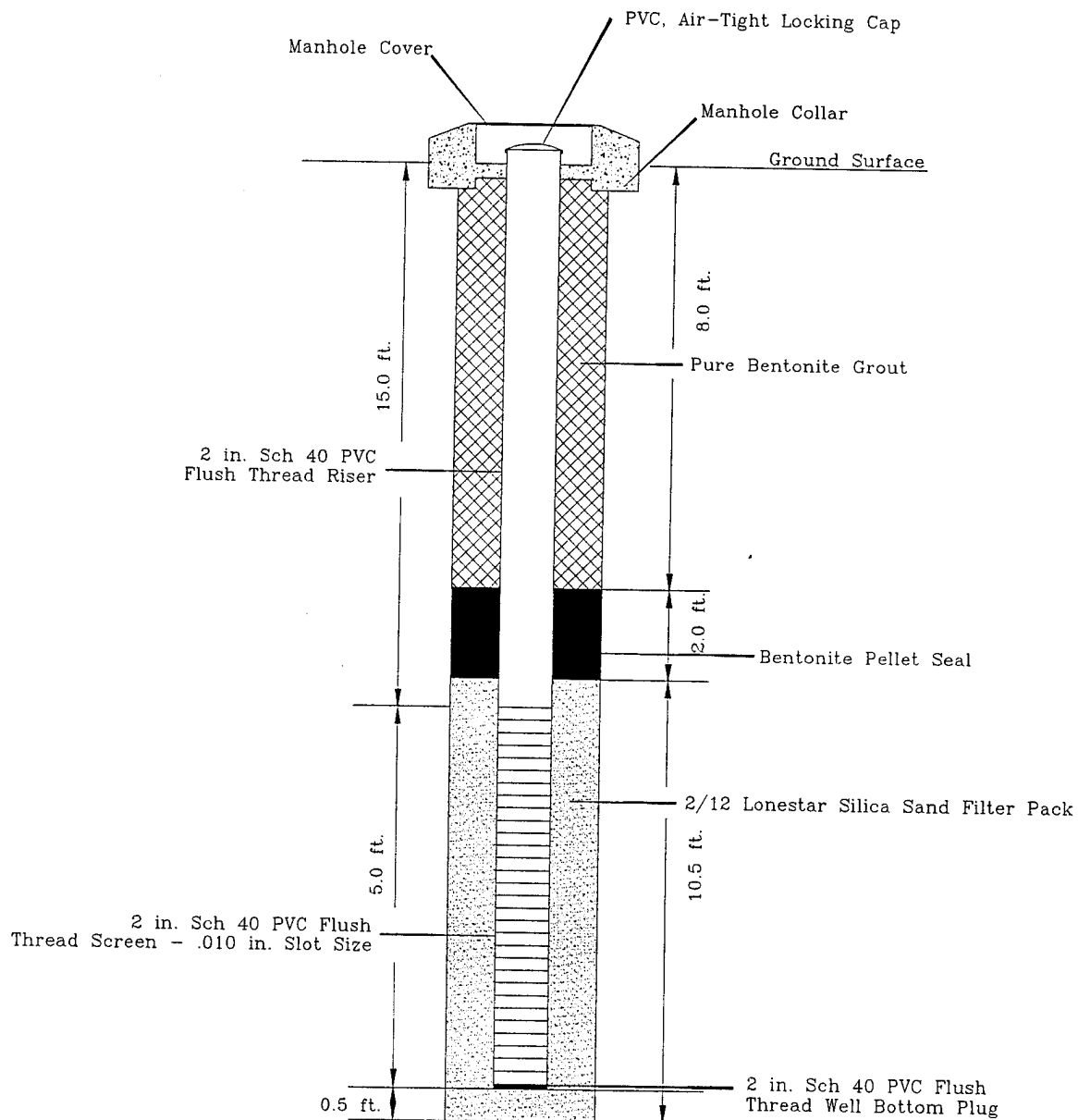
PIEZOMETER CONSTRUCTION LOG
WELL NO. PZ-001

OPTTECH
OPERATIONAL TECHNOLOGIES
CORPORATION

JANUARY 1995

HAYWARD\PZ-001

Project: <u>HAYWARD ANG'S</u>	Date Installed: <u>7/27/94</u>
Town/City: <u>HAYWARD</u>	Drilling Contractor: <u>TONTO DRILLING</u>
County: <u>ALAMEDA</u> State: <u>CALIFORNIA</u>	Drilling Method: <u>HOLLOW-STEM AUGER</u>
TOC Elev: <u>30.95 Ft.</u>	Borehole Diameter: <u>2 INCH</u>
Ground Elev.: <u>31.18 Ft.</u>	Development Technique: <u>NA</u>
Water Level: <u>11.48 Ft. Below TOC</u>	
Total Well Depth: <u>20.50 Ft.</u>	Not To Scale



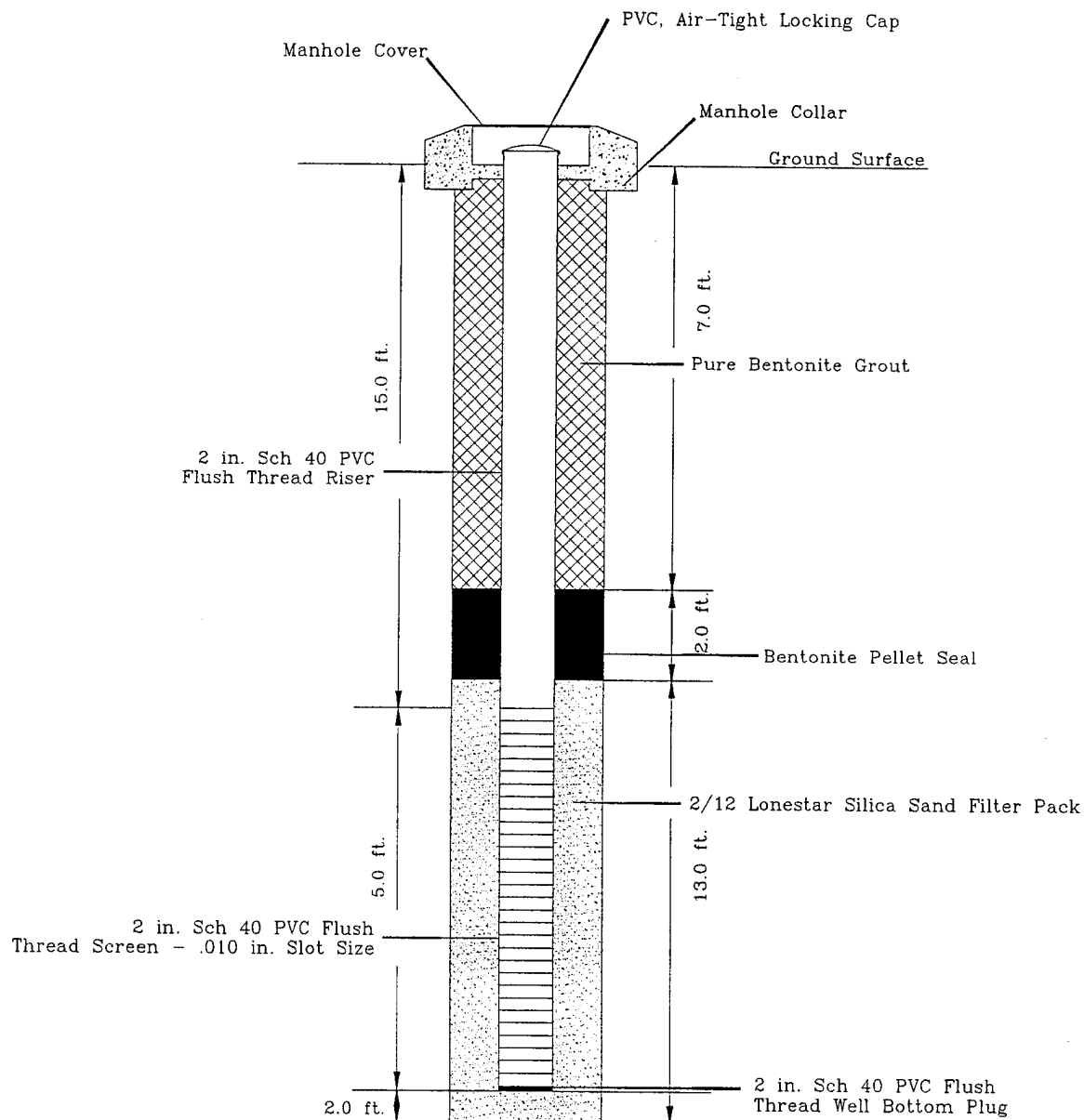
PIEZOMETER CONSTRUCTION LOG
WELL NO. PZ-002

OPTTECH
OPERATIONAL TECHNOLOGIES
CORPORATION

JANUARY 1995

HAYWARD\PZ-002

Project: <u>HAYWARD ANG5</u>	Date Installed: <u>7/28/94</u>
Town/City: <u>HAYWARD</u>	Drilling Contractor: <u>TONTO DRILLING</u>
County: <u>ALAMEDA</u> State: <u>CALIFORNIA</u>	Drilling Method: <u>HOLLOW-STEM AUGER</u>
TOC Elev: <u>34.31 Ft.</u>	Borehole Diameter: <u>2 INCH</u>
Ground Elev.: <u>34.57 Ft.</u>	Development Technique: <u>NA</u>
Water Level: <u>14.34 Ft. Below TOC</u>	
Total Well Depth: <u>22.00 Ft.</u>	Not To Scale



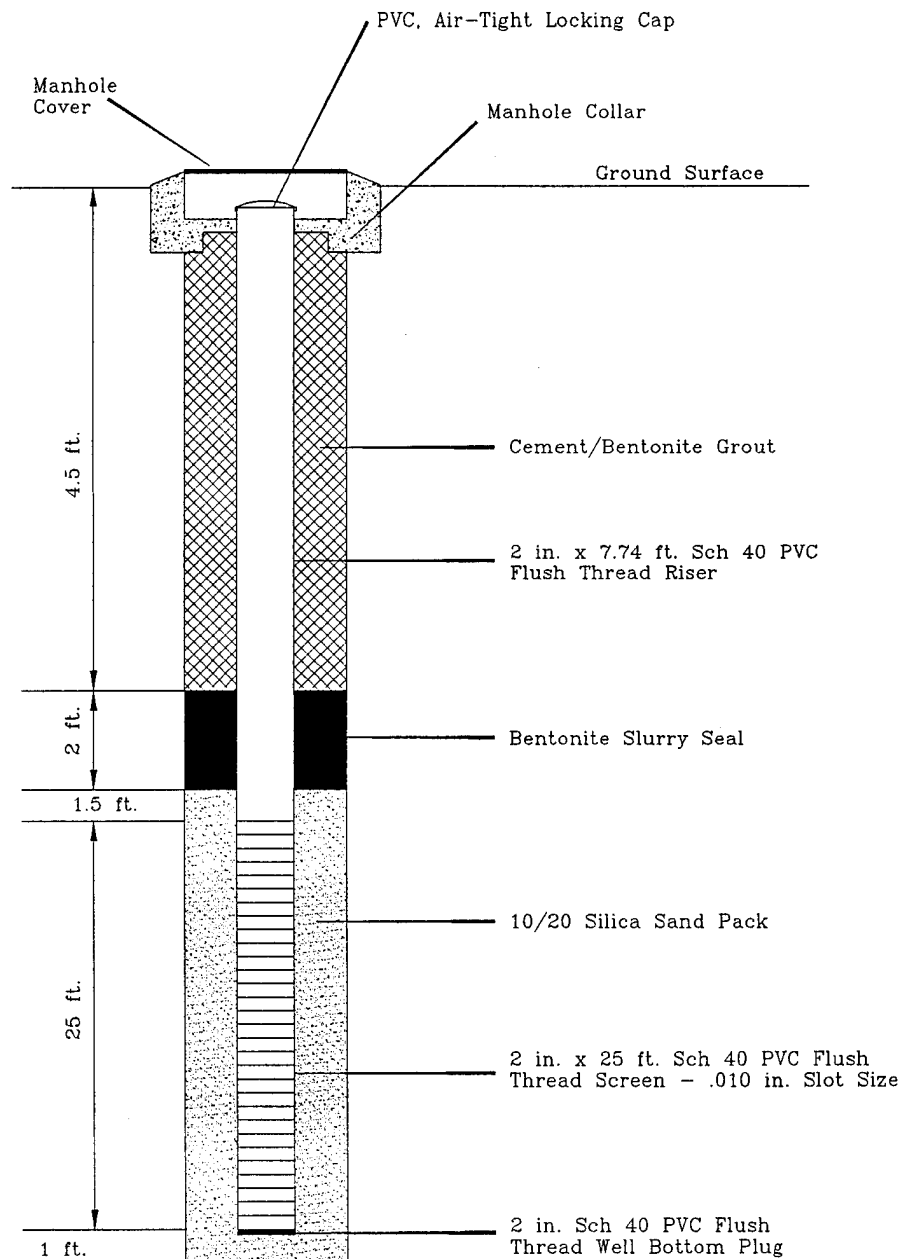
PIEZOMETER CONSTRUCTION LOG
WELL NO. PZ-003

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OPERATIONAL TECHNOLOGIES
CORPORATION

JANUARY 1995

HAYWARD\PZ-003

Project: <u>Hayward ANG5</u>	Date Installed: <u>August 1, 1994</u>
Town/City: <u>Hayward</u>	Drilling Contractor: <u>Tonto Drilling Services Inc.</u>
County: <u>Alameda</u> State: <u>California</u>	Drilling Method: <u>Hollow Stem Auger</u>
TOC Elev: <u>27.12'</u>	Borehole Diameter: <u>3 3/8"</u>
Ground Elev.: <u>27.38'</u>	Development Technique: <u>Electric Submersible Pump</u>
Water Level: <u>9.33'</u> TOC	
Total Well Depth: <u>34.0'</u>	Not To Scale



WELL CONSTRUCTION LOG
Well No. BG-001MW

OPT ECH
OPERATIONAL TECHNOLOGIES
CORPORATION
OCTOBER 1994 HAY/BG-001MW

Project: Hayward ANG5

Town/City: Hayward

County: Alameda State: California

TOC Elev: 27.59'

Ground Elev.: 27.89'

Water Level: 9.66' TOC

Total Well Depth: 28.5'

Date Installed: August 3, 1994

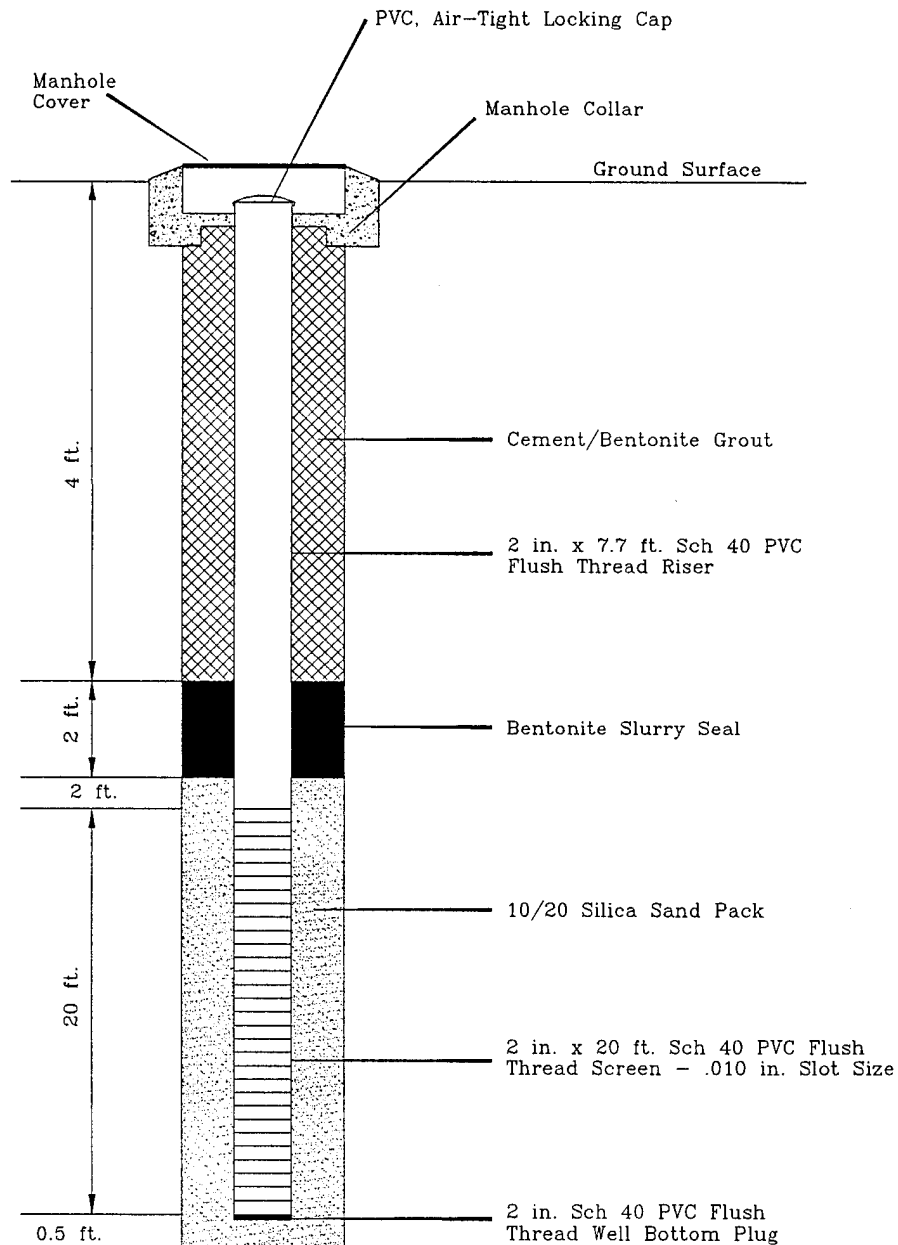
Drilling Contractor: Tonto Drilling Services Inc.

Drilling Method: Hollow Stem Auger

Borehole Diameter: 3 3/8"

Development Technique: Electric Submersible Pump

Not To Scale



WELL CONSTRUCTION LOG
Well No. 04-001MW

O P T E C H
OPERATIONAL TECHNOLOGIES
CORPORATION
OCTOBER 1994 HAY\04-001MW

Project: Hayward ANG5

Date Installed: August 2, 1994

Town/City: Hayward

Drilling Contractor: Tonto Drilling
Services Inc.

County: Alameda State: California

Drilling Method: Hollow Stem Auger

TOC Elev: 27.64'

Borehole Diameter: 3 3/8"

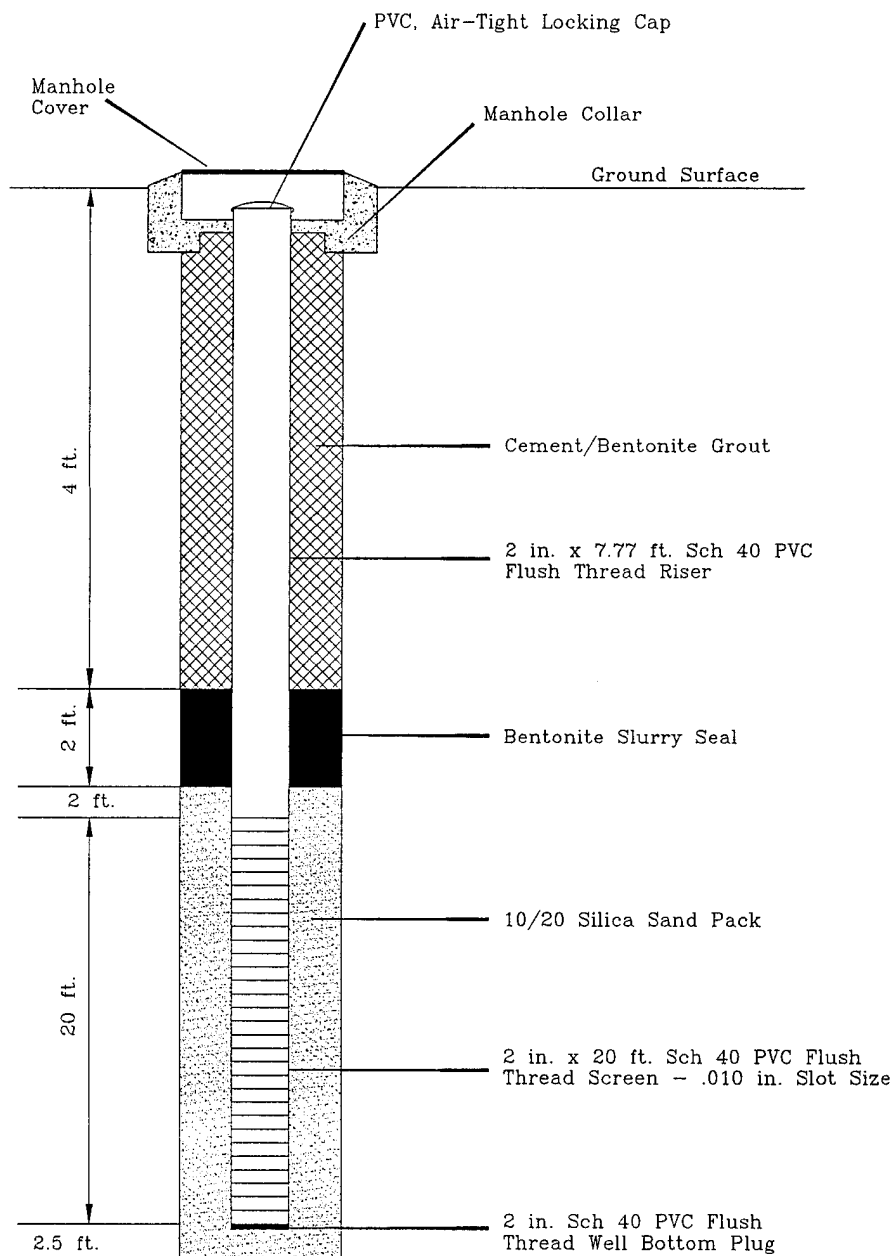
Ground Elev.: 27.87'

Development Technique: Electric Submersible Pump

Water Level: 10.11' TOC

Total Well Depth: 30.5'

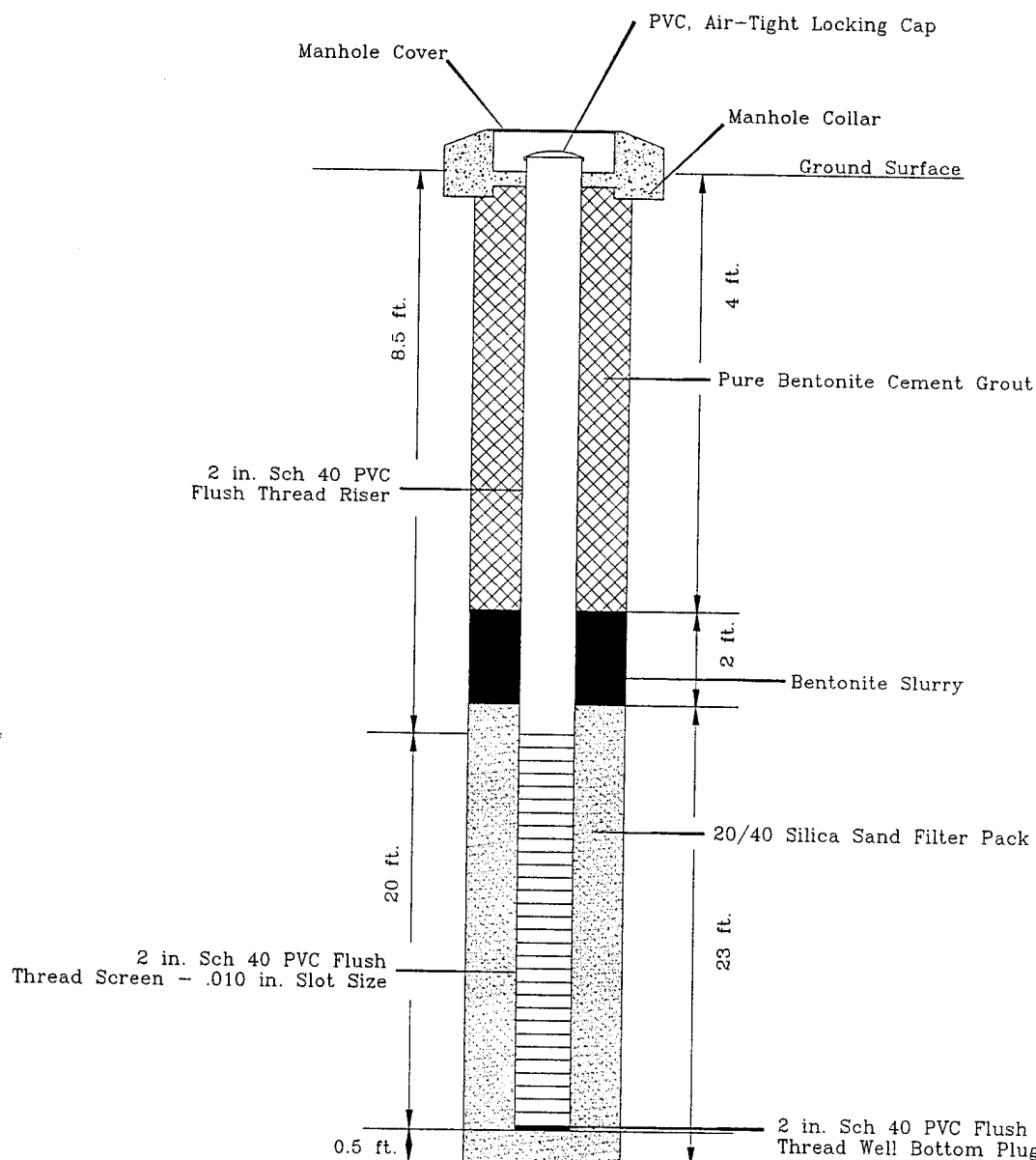
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WELL CONSTRUCTION LOG
Well No. 04-002MW

OPT ECH
OPERATIONAL TECHNOLOGIES
CORPORATION
OCTOBER 1994 HAY\04-002MW

Project: <u>HAYWARD ANG5</u>	Date Installed: <u>AUGUST 4, 1994</u>
Town/City: <u>HAYWARD</u>	Drilling Contractor: <u>TONTO DRILLING</u>
County: <u>ALAMEDA</u> State: <u>CALIFORNIA</u>	Drilling Method: <u>HOLLOW-STEM AUGER</u>
TOC Elev: <u>32.95 ft.</u>	Borehole Diameter: <u>3 3/8"</u>
Ground Elev.: <u>33.20 ft</u>	Development Technique: <u>SURGE PUMPING</u>
Water Level: <u>12.70 ft. BELOW TOC</u>	
Total Well Depth: <u>29.0 ft.</u>	Not To Scale



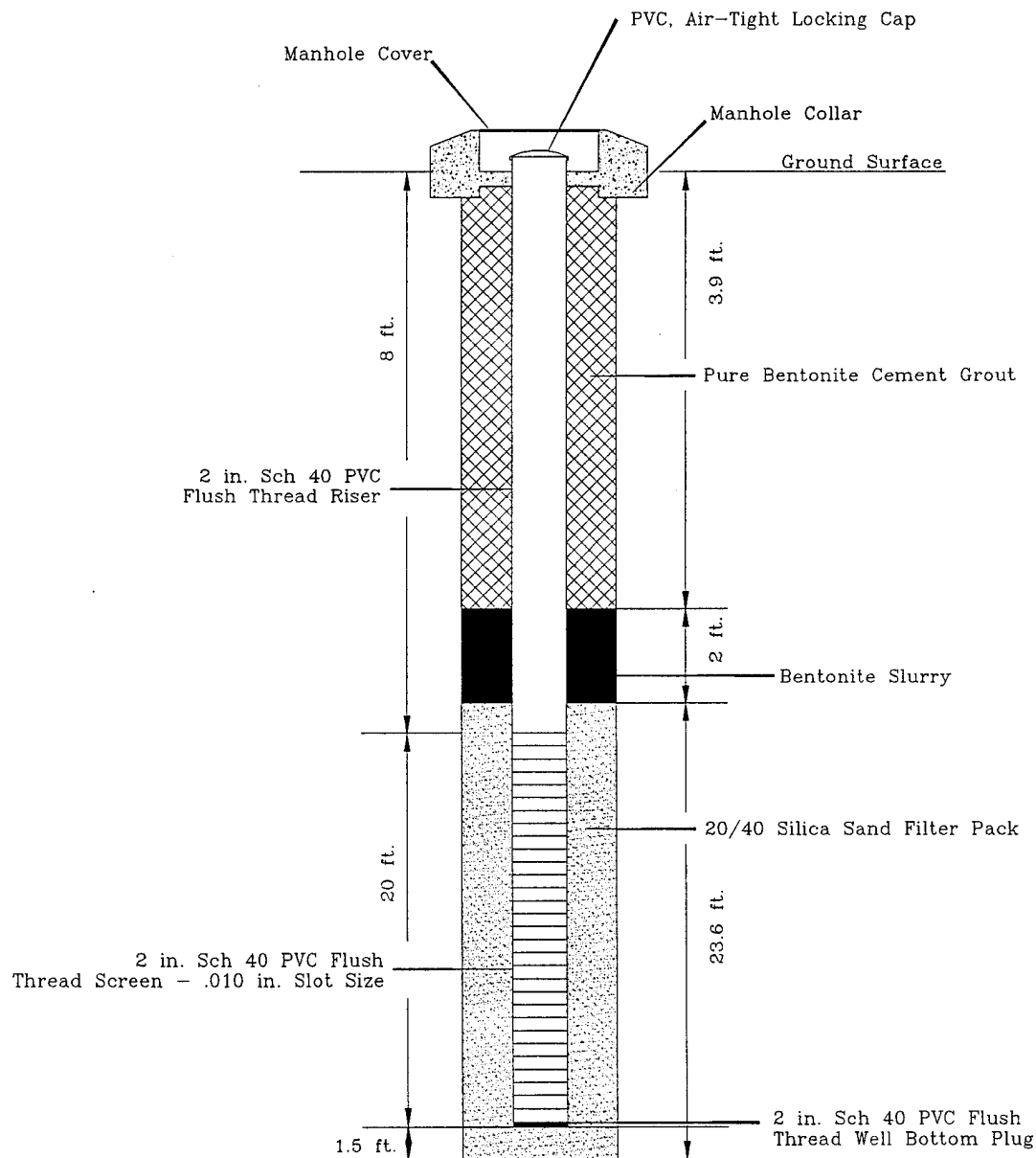
MONITORING WELL CONSTRUCTION LOG
WELL NO. 05-001MW

OPTTECH
OPERATIONAL TECHNOLOGIES
CORPORATION

DECEMBER 1994

HAYWARD\05-001MW

Project: <u>HAYWARD ANG5</u>	Date Installed: <u>AUGUST 4, 1994</u>
Town/City: <u>HAYWARD</u>	Drilling Contractor: <u>TONTO DRILLING</u>
County: <u>ALAMEDA</u> State: <u>CALIFORNIA</u>	Drilling Method: <u>HOLLOW-STEM AUGER</u>
TOC Elev: <u>31.17 ft.</u>	Borehole Diameter: <u>3 3/8"</u>
Ground Elev.: <u>31.51 ft.</u>	Development Technique: <u>SURGE PUMPING</u>
Water Level: <u>12.03 ft. BELOW</u> TOC	
Total Well Depth: <u>29.5 ft.</u>	Not To Scale



MONITORING WELL CONSTRUCTION LOG
WELL NO. 05-002MW

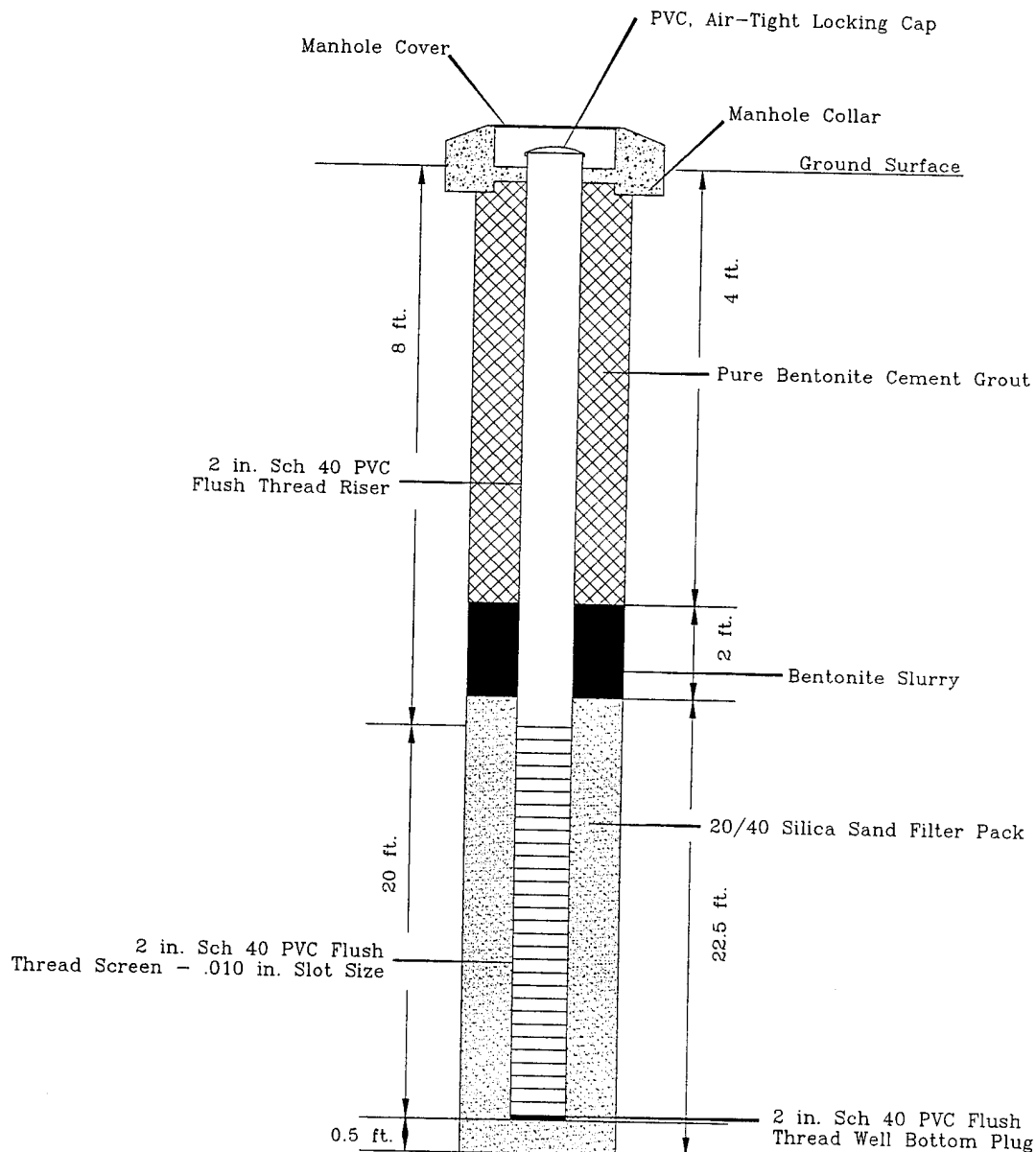
OPTTECH
OPERATIONAL TECHNOLOGIES
CORPORATION

DECEMBER 1994

HAYWARD\05-002MW

Project: <u>HAYWARD ANG3</u>	Date Installed: <u>AUGUST 4, 1994</u>
Town/City: <u>HAYWARD</u>	Drilling Contractor: <u>TONTO DRILLING</u>
County: <u>ALAMEDA</u> State: <u>CALIFORNIA</u>	Drilling Method: <u>HOLLOW-STEM AUGER</u>
TOC Elev: <u>31.80 ft.</u>	Borehole Diameter: <u>3 3/8"</u>
Ground Elev.: <u>32.09 ft.</u>	Development Technique: <u>SURGE PUMPING</u>
Water Level: <u>12.70 ft. BELOW TOC</u>	
Total Well Depth: <u>28.5 ft.</u>	

Not To Scale



MONITORING WELL CONSTRUCTION LOG
WELL NO. 05-003MW

OPTTECH
OPERATIONAL TECHNOLOGIES
CORPORATION

DECEMBER 1994

HAYWARD\05-003MW

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APPENDIX C
BORING LOGS

SECTION C.1 INTRODUCTION

Boring log diagrams have been compiled for each borehole drilled during this study. Diagrams are presented in numerical order. The borehole identification is keyed to the site number and background (BG), borehole (BH), replacement borehole (RBH), or monitoring well designation (MW) (i.e., 05-002RBH). The diagrams combine in one page both a verbal and graphical illustration of the lithology encountered during drilling, water level data encountered during drilling, and surveyed elevation of the ground surface at the borehole location.

The sample description includes the color, texture, mineralogy, moisture and consistency for each sample collected. The proportions of sand, gravel, and fines are visually estimated and described using the following semi-quantitative adjectives:
















<u>Adjective</u>	<u>Estimated Percent of Total Sample</u>
Trace	0 - 5
Few	5 - 10
Little	15 - 25
Some	30 - 45
Mostly	50 - 100

Proportional adjectives precede the lithology, such as little gravel (15 - 25% gravel) and trace of silt (0 - 5% silt). Lithologic symbols are derived and generalized from the Unified Soil Classification System shown in Figure C.1.

In the boring logs that follow, the column headings have the following meanings:

Depth:	Depth in feet below land surface.
Blows/6 in.:	The number of blows required to drive a split-spoon sampler each of the 6-inch intervals.
Field Screening:	The reading of photoionization compounds detected in soil sample by a photoionization detector.
Sampled:	The interval of sample cored below land surface.
Percent Recovery:	The percentage of sample recovered in the split-spoon sampler per sampling run.

KEY TO BORING LOG SYMBOLS

UNIFIED SOIL CLASSIFICATION SYSTEM - ASTM D2487					
MAJOR DIVISIONS			SYMBOL/ GRAPHIC		DESCRIPTIONS
COARSE-GRAINED SOILS (>50% Smaller Than #200 Sieve)	GRAVELS (More than 50% of coarse fraction is larger than the #4 sieve size.)	Clean gravels with little or no fines	GW		Well-Graded Gravels, Gravel - Sand Mixtures
			GP		Poorly Graded Gravels, Gravels - Sand Mixtures
		Gravels with over 12% fines	GM		Silty Gravels, Poorly Graded Gravel-Sand-Clay Mixtures
			GC		Clayey Gravels, Poorly Graded Gravel-Sand-Clay Mixtures
	SANDS (More than 50% of coarse fraction is smaller than the #4 sieve size.)	Clean sands with little or no fines	SW		Well-Graded Sands, Gravelly Sands
			SP		Poorly Graded Sands, Gravelly Sands
		Sands with over 12% fines	SM		Silty Sands, Poorly Graded Sand-Silt Mixtures
			SC		Clayey Sands, Poorly Graded Sand-Clay Mixtures
FINE-GRAINED SOILS (>50% Smaller Than #200 Sieve)	SILTS AND CLAYS (Liquid limit less than 50)		ML		Inorganic Silts and Very Fine Sands, Silty or Clayey Fine Sands
			CL		Inorganic Clays of Low to Medium Plasticity; Gravelly, Sandy or Silty Clays; Lean Clays
			OL		Organic Clays and Organic Silty Clays of Low Plasticity
	SILTS AND CLAYS (Liquid limit greater than 50)		MH		Inorganic Silts, Micaceous or Diatomaceous Fine Sandy or Silty Soils, Elastic Silts
			CH		Inorganic Clays of High Plasticity Fat Clays
			OH		Organic Clays of Medium to High Plasticity, Organic Silts
HIGHLY ORGANIC SOILS			Pt		Peat and Other Highly Organic Soils

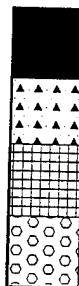


Shaded interval represents soil sample.
Blackened interval indicates portion of sample prepared for laboratory analysis.



Water Table Level

PID Photo-Ionization Detector readings (ppm)



Asphalt

Portland Cement Concrete

Cement Grout

Boulders or Bedrock

FIGURE C.1

FORMS\KEYLOG

KEY TO BORING LOG
216th EIS and 234th CCSQ
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LOG OF BORING PZ-001

Project No.:	1315-115	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	22.0 ft. BLS
Drilling Co.:	Tonto Drilling Services, Inc.	Depth To Water:	13.17 ft.
Driller:	Randy Gustafson	Date Measured:	07/27/94
Date Drilled:	07/27/94	Surface Elevation:	28.22 ft.
Drilling Method:	Hollow-Stem Auger		

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
					Organic silt, black to very dark gray.	-	-	-	-
					Silt, reddish-brown, granular, stiff.	-	-	-	-
					Silt, brown, wet at 14 feet.				
5									
10									
15									
20									
					Boring Terminated at 22.0 ft.				

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LOG OF BORING PZ-002

Project No.:	1315-115	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	20.5 ft. BLS
Drilling Co.:	Tonto Drilling Services, Inc.	Depth To Water:	NA
Driller:	Randy Gustafson	Date Measured:	NA
Date Drilled:	07/27/94	Surface Elevation:	31.18 ft.
Drilling Method:	Hollow-Stem Auger		


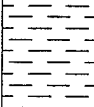
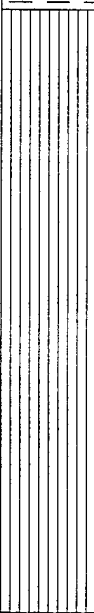

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
					Asphalt.				
					Sand, fine-grained, greenish-gray to dark greenish-gray.	-	-	-	-
5					Silt, black.				
					Silt, brown.				
10									
15					Silt/clay, brown.	-	-	-	-
						-	-	-	-
					Silt, brown, very loose, wet.				
20									
					Boring Terminated at 20.5 ft.				

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LOG OF BORING PZ-003

Project No.:	1315-115	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	22.0 ft. BLS
Drilling Co.:	Tonto Drilling Services, Inc.	Depth To Water:	NA
Driller:	Randy Gustafson	Date Measured:	NA
Date Drilled:	07/28/94	Surface Elevation:	34.57 ft.
Drilling Method:	Hollow-Stem Auger		

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
					Probable fill, mostly sand and silt, brown, dry.				
					Organic silt, black.	-	-	-	-
5					Silt, brown.	-	-	-	-
10									
15					Silt/clay, brown, high plasticity.	-	-	-	-
20									
					Boring Terminated at 22.0 ft.				



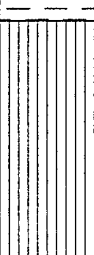



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LOG OF BORING BG-001BH

Project No.: 1315-115
Logged By: Bill Hughes
Drilling Co.: Tonto Drilling Services, Inc.
Driller: Randy Gustafson
Date Drilled: 08/12/94
Drilling Method: Hollow-Stem Auger

Sampling Method: California-Style Sampler
Depth Drilled: 26.5 ft. BLS
Depth To Water: NA
Date Measured: NA
Surface Elevation: 27.38 ft.

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
10		100	⊗		Asphalt.	0	-	-	-
12			⊗		Organic silty clay, very dark brown, dry to moist.				
14			⊗						
5									
3		100	⊗		Silt and fine sand, brown, wet.	1.2	-	-	-
4									
7									
10									
15		100	⊗		Silt, brown, wet.	1.2	-	-	-
3									
3									
3									
20									
25		100	⊗		Silt, brown, wet.	1.2	-	-	-
18									
19									
24					Gravelly sand in lower 6", brown, wet.				
					Boring Terminated at 26.5 ft.				

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LOG OF BORING BG-001MW

Project No.:	1315-115	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	34.0 ft. BLS
Drilling Co.:	Tonto Drilling Services, Inc.	Depth To Water:	9.33 ft. TOC
Driller:	Randy Gustafson	Date Measured:	08/03/94
Date Drilled:	08/01/94	Surface Elevation:	27.38 ft.
Drilling Method:	Hollow-Stem Auger	TOC Elevation:	27.12 ft.

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING				Monitoring Well
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)	
					Asphalt.					
					Organic silt, black to dark brown, dry.					
5	4	100	X		Sandy silt, fine, brown, loose, dry.					
	6				Sandy silt, brown, mottled gray and brown in lower 6".	8.6	-	-	-	
	7									
10	5	100	X		Silt, very dark gray, medium plasticity, some root casts, moist.	20.0	-	-	-	
	7									
	7									
15	7	100	X		Sandy silt to silty clay, brown with gray mottling in upper 6".	0	-	-	-	
	3									
	3									
20	5	100	X		Silty clay/clayey silt, light olive brown, lensed with sand.	0	-	-	-	
	9									
	11									
25	5	100	X		Silt, brown to silty sand, grayish-brown.	3.2	-	-	-	
	8									
	12									
30	17	100	X		Sand, coarse, brown, in upper 6". Gravelly sand with coarse gravel in lower 12".	0	-	-	-	
	25									
	31									
35					Boring Terminated at 34.0 ft.					

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LOG OF BORING 04-001BH

Project No.:	1315-115	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	21.5 ft. BLS
Drilling Co.:	Tonto Drilling Services, Inc.	Depth To Water:	NA
Driller:	Randy Gustafson	Date Measured:	NA
Date Drilled:	07/28/94	Surface Elevation:	27.78 ft.
Drilling Method:	Hollow-Stem Auger		

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
15 19 12		100			Probable fill, mostly gravelly silt, yellowish-brown, dry.	0	-	-	-
					Organic silt, black, dry.				
5 4 5 6		100			Silt, brown, to silty clay, mottled, dry.	0	-	-	-
10 4 5 4		100			Silty clay to clay, olive brown to olive gray, high plasticity.	2.9	-	-	-
15 5 6 7		100			Silty clay/clayey silt, brown, with root casts, gray, wet.	28.0	-	-	-
20 2 4 7		100			Silt, olive brown to silty clay, brown, medium plasticity, saturated.	1.0	-	-	-
					Boring Terminated at 21.5 ft.				

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LOG OF BORING 04-002BH

Project No.: 1315-115
Logged By: Bill Hughes
Drilling Co.: Tonto Drilling Services, Inc.
Driller: Randy Gustafson
Date Drilled: 07/28/94
Drilling Method: Hollow-Stem Auger

Sampling Method: California-Style Sampler
Depth Drilled: 21.5 ft. BLS
Depth To Water: NA
Date Measured: NA
Surface Elevation: 27.94 ft.






Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
16 20 12		100			Probable fill, brown to dark brown, dry.	2.4	-	-	-
5 6 8 4		100			Sloughed material, yellowish-brown to dark brown, dry.	0.8	-	-	-
10 2 4 5		100			Silt/clay, brown, plastic.	0.1	-	-	-
15 2 3 4		100			Clayey silt/silty clay, brown.	0.4	-	-	-
20 10 16 19		34			Silt, brown, saturated.	0.7	-	-	-
					Boring Terminated at 21.5 ft.				

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LOG OF BORING 04-003BH

Project No.:	1315-115	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	21.5 ft. BLS
Drilling Co.:	Tonto Drilling Services, Inc.	Depth To Water:	NA
Driller:	Randy Gustafson	Date Measured:	NA
Date Drilled:	07/28/94	Surface Elevation:	27.95 ft.
Drilling Method:	Hollow-Stem Auger		

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
8 7 2		100	X		Probable fill, mostly sand, fine-grained, brown with gravel, coarse, to silt, dry.	0	-	-	-
5 4 5 7		100	X		Sand, very fine-grained, to silt, brown.	0	-	-	-
10 3 4 5		100	X		Silt, reddish-gray to dark brown, low plasticity, with root casts, gray.	0	-	-	-
15 8 12 15		100	X		Silt, brown, medium plasticity.	0	-	-	-
20 3 5 7		100	X		Sand, very fine-grained, to silt, reddish-gray to brown, medium plasticity.	0	-	-	-
					Boring Terminated at 21.5 ft.				





















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LOG OF BORING 04-004BH

Project No.: 1315-115
Logged By: Bill Hughes
Drilling Co.: Tonto Drilling Services, Inc.
Driller: Randy Gustafson
Date Drilled: 07/28/94
Drilling Method: Hollow-Stem Auger

Sampling Method: California-Style Sampler
Depth Drilled: 21.5 ft. BLS
Depth To Water: NA
Date Measured: NA
Surface Elevation: 28.13 ft.

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
21		100	X		Probable fill with gravel, coarse, dry.	0	-	-	-
17		100	X		Organic silt, black with some white powdering, dry.	0	-	-	-
5			X						
5			X		Silt, brown to yellowish-brown, with root casts, dark brown, dry.	0	-	-	-
5			X		Silt to sand, very fine-grained, brown.	0	-	-	-
8			X						
5			X						
4		100	X		Silt, reddish-gray to brown, medium plasticity with some root casts.	0	-	-	-
7		100	X		Silt, dark brown to olive brown.	0	-	-	-
7			X						
3			X						
5			X						
5			X						
10			X						
7		100	X		Silt, brown with root casts.	0	-	-	-
4			X						
6			X						
15			X						
5		100	X		Silt, brown, medium plasticity.	0	-	-	-
7			X						
8			X						
20			X						
3			X						
3			X						
5			X						
Boring Terminated at 21.5 ft.									

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LOG OF BORING 04-001MW

Project No.:	1315-115	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	28.5 ft. BLS
Drilling Co.:	Tonto Drilling Services, Inc.	Depth To Water:	9.66 ft. TOC
Driller:	Randy Gustafson	Date Measured:	08/05/94
Date Drilled:	08/03/94	Surface Elevation:	27.89 ft.
Drilling Method:	Hollow-Stem Auger	TOC Elevation:	27.59 ft.

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING				Monitoring Well
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)	
					Organic silt, black, dry.					
					Silt, brown.					
5	7 9 13	100	X		Silty sand, brown with root casts, dry.	2.9	-	-	-	
10	4 4 7	100	X		Silt, reddish-gray to dark brown, plastic.	-	-	-	-	
15	7 10 15	100	X		Silt, brown, mottled, plastic, moist.	0.4	-	-	-	
20	2 4 6	100	X		Silt, brown, massive.	0	-	-	-	
25	3 4 7 8 8 11	100	X		Silt, brown, mottled.	0	-	-	-	
		100	X		Silt, brown, no plasticity.	0	-	-	-	
30					Boring Terminated at 28.5 ft.					

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LOG OF BORING 04-002MW

Project No.:	1315-115	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	30.5 ft. BLS
Drilling Co.:	Tonto Drilling Services, Inc.	Depth To Water:	10.11 ft. TOC
Driller:	Randy Gustafson	Date Measured:	08/05/94
Date Drilled:	08/02/94	Surface Elevation:	27.87 ft.
Drilling Method:	Hollow-Stem Auger	TOC Elevation:	27.64 ft.














Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING				Monitoring Well
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)	
					Asphalt.					
					Organic silt, dark brown to black, dry.					
					Silt, brown, dry.					
5	4	100	X		Silt, brown in upper 6".	5.8	-	-	-	
	9				Silty sand, brown to greenish-gray in lower 12".					
	9									
10	3	100	X		Silt, dark greenish-gray with root casts, odor.	33.8	-	-	-	
	5									
	7									
15	8	100	X		Silt, brown with root casts, gray to dark greenish-gray, odor.	38.0	-	-	-	
	8									
	8									
20	8	100	X		Silt, light brownish-gray, mottled.	0	-	-	-	
	11									
	11									
25	5	100	X		Silt, brown, mottled.	2.9	-	-	-	
	6									
	7									
30	9	100	X		Silt, brown with pods, gray.	0	-	-	-	
	9									
	9				Boring Terminated at 30.5 ft.					

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LOG OF BORING 05-001BH

Project No.:	1315-115	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	15.0 ft. BLS
Drilling Co.:	Tonto Drilling Services, Inc.	Depth To Water:	NA
Driller:	Randy Gustafson	Date Measured:	NA
Date Drilled:	07/29/94	Surface Elevation:	31.98 ft.
Drilling Method:	Hollow-Stem Auger		






Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
14	14	100	X		Asphalt.	1.5	-	-	-
9	9		X		Probable fill, mostly gravelly silt, brown, dry.				
10	10		X		Organic silty clay/clayey silt, black, dry.				
5	6	100	X		Silt, brown to olive brown, dry to moist.	1.7	-	-	-
7	7		X		Silt, olive brown to reddish-gray, dry.	12.4	-	-	-
8	8	100	X						
5	5		X						
6	6		X						
10	3	100	X		Silt, dark greenish-gray, lensed with sand, wet.	13.4	-	-	-
3	3		X						
4	4		X						
5	5	100	X		Silt, dark greenish-gray, wet.	224.0	-	-	-
15	7		X						
					Boring Terminated at 15.0 ft.				
20									

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LOG OF BORING 05-002BH

Project No.:	1315-115	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	15.5 ft. BLS
Drilling Co.:	Tonto Drilling Services, Inc.	Depth To Water:	NA
Driller:	Randy Gustafson	Date Measured:	NA
Date Drilled:	07/29/94	Surface Elevation:	31.66 ft.
Drilling Method:	Hollow-Stem Auger		







Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
2	2	100	X		Asphalt.	0	-	-	-
3	3				Silt, black to brown, dry.				
8	8								
5	6	100	X		Silt, greenish-gray, dry.	1.1	-	-	-
8	8								
9	9								
10	2	100	X		Silt, dark greenish-gray, with root casts.	291.0	-	-	-
3	3								
4	4								
15	6	100	X		Silt, dark greenish-gray, with root casts, wet.	1.5	-	-	-
8	8								
10	10								
					Boring Terminated at 15.5 ft.				
20									

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LOG OF BORING 05-003BH

Project No.:	1315-115	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	15.0 ft. BLS
Drilling Co.:	Tonto Drilling Services, Inc.	Depth To Water:	NA
Driller:	Randy Gustafson	Date Measured:	NA
Date Drilled:	07/29/94	Surface Elevation:	31.24 ft.
Drilling Method:	Hollow-Stem Auger		

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
9		100	X		Asphalt.				
5					Probable fill, mostly gravelly sand, brown to reddish-brown, dry.	27.3	-	-	-
7					Organic silt, black, stiff.				
5	2	100	X		Silt, dark greenish-gray, dry.	297.0	-	-	-
3									
4									
10	3	100	X		Silt, dark greenish-gray.	214.0	-	-	-
3									
6									
4		100	X		Silt, dark greenish-gray.	531.0	-	-	-
7									
11									
15					Boring Terminated at 15.0 ft.				
20									

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LOG OF BORING 05-004BH

Project No.:	1315-115	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	15.5 ft. BLS
Drilling Co.:	Tonto Drilling Services, Inc.	Depth To Water:	12.7 ft. BLS
Driller:	Randy Gustafson	Date Measured:	NA
Date Drilled:	07/29/94	Surface Elevation:	31.53 ft.
Drilling Method:	Hollow-Stem Auger		

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
	3	100			Asphalt.	32.5	-	-	-
	5				Probable fill, mostly gravelly silt, dark brown to black.				
	4				Sandy silt, mottled, dry.				
5	3	100			Silt, dark greenish-gray, dry.	881.0	-	-	-
	4								
	7								
10	3	100			Sand, fine-grained and silt, dark greenish-gray, strong odor.	1876.0	-	-	-
	4								
	3	100			Silt, dark greenish-gray, strong odor, wet.	1200.0	-	-	-
	4								
	7								
	5	100			Silt, dark greenish-gray, with root casts, odor, wet.	881.0	-	-	-
	5								
15	11								
					Boring Terminated at 15.5 ft.				

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LOG OF BORING 05-005BH

Project No.:	1315-115	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	15.5 ft. BLS
Drilling Co.:	Tonto Drilling Services, Inc.	Depth To Water:	12.3 ft. BLS
Driller:	Randy Gustafson	Date Measured:	NA
Date Drilled:	07/29/94	Surface Elevation:	32.19 ft.
Drilling Method:	Hollow-Stem Auger		

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
					Asphalt.				
10 3 4		100			Probable fill, mostly sandy gravel, dry.	0	-	-	-
					Organic silt, black, very stiff.				
5 9 7 9		100			Silt, greenish-gray, dry.	1.3	-	-	-
10 3 5 7		100			Silt, dark greenish-gray.	0	-	-	-
2 3 5		100			Silt, dark greenish-gray, lensed with sand, fine-grained, moist to wet.	0	-	-	-
2 4 7		100			Silt, dark greenish-brown to greenish-gray, plastic, wet.	0	-	-	-
15					Boring Terminated at 15.5 ft. BLS.				

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LOG OF BORING 05-02RBH

Project No.: 1315-115
Logged By: Bill Hughes
Drilling Co.: Tonto Drilling Services, Inc.
Driller: Randy Gustafson
Date Drilled: 08/06/94
Drilling Method: Hollow-Stem Auger

Sampling Method: California-Style Sampler
Depth Drilled: 15.5 ft. BLS
Depth To Water: NA
Date Measured: NA
Surface Elevation: 31.59 ft.

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
					Asphalt.				
4		100			Probable fill, mostly sand, brown and silt, black, mottled.	0	-	-	-
7					Organic silt/silty clay, stiff, dry to moist.				
5	3 7 9	100			Silt, olive brown to greenish-gray, mottled, moist.	-	-	-	-
10	3 4 5	100			Silt/silty clay, dark greenish-gray, plastic, odor, wet.	249.0	-	-	-
15	7 11 13	100			Silt, dark greenish-gray to dark gray, medium plasticity, stiff, wet.	8.4	-	-	-
					Boring Terminated at 15.5 ft.				

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LOG OF BORING 05-03RBH

Project No.:	1315-115	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	15.5 ft. BLS
Drilling Co.:	Tonto Drilling Services, Inc.	Depth To Water:	NA
Driller:	Randy Gustafson	Date Measured:	NA
Date Drilled:	08/06/94	Surface Elevation:	30.82 ft.
Drilling Method:	Hollow-Stem Auger		

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
					Asphalt.				
					Probable fill, mostly sand and gravel, brown.	0	-	-	-
					Organic silt, black, plastic, stiff.				
5	5 8 6	100			Silt/clay, brown, plastic, to silt, dark greenish-gray, low plasticity, moist.	105.0	-	-	-
10		100			Silt/silty clay, dark greenish-gray, high plasticity, odor, moist.	1210.0	-	-	-
15	6 8 9	100			Silt, dark greenish-gray, with root casts, medium plasticity.	518.0	-	-	-
					Boring Terminated at 15.5 ft.				

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Sampling Method:	California-Style Sampler
Depth Drilled:	15.0 ft. BLS
Depth To Water:	NA
Date Measured:	NA
Surface Elevation:	32.47 ft.

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LOG OF BORING 05-05RBH

Project No.: 1315-115
Logged By: Bill Hughes
Drilling Co.: Tonto Drilling Services, Inc.
Driller: Randy Gustafson
Date Drilled: 08/05/94
Drilling Method: Hollow-Stem Auger

Sampling Method: California-Style Sampler
Depth Drilled: 15.5 ft. BLS
Depth To Water: NA
Date Measured: NA
Surface Elevation: 32.15 ft.

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING			
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)
					Asphalt.				
					Organic silt, block, plastic.				
7	7	75				-	-	-	-
7	7								
7	7								
5									
4	4	100			Silt, olive-gray, stiff, moist.	0.6	-	-	-
5	5								
6	6	100			Silt, dark greenish-gray, stiff, moist.	1.6	-	-	-
4	4								
7	7								
5	5								
10									
4	4	100			Silt to sand, very fine-grained, dark greenish-gray, saturated.	0.2	-	-	-
5	5								
5	5	100			Silt, dark greenish-gray to brown, stiff, plastic, moist.	0.1	-	-	-
2	2								
2	2								
3	3								
3	3	50			Silt, dark greenish-gray, stiff, plastic.	0	-	-	-
4	4								
7	7								
15					Boring Terminated at 15.5 ft. BLS.				

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LOG OF BORING 05-001MW

Project No.:	1315-115	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	29.0 ft. BLS
Drilling Co.:	Tonto Drilling Services, Inc.	Depth To Water:	NA
Driller:	Randy Gustafson	Date Measured:	NA
Date Drilled:	08/04/94	Surface Elevation:	33.20 ft.
Drilling Method:	Hollow-Stem Auger	TOC Elevation:	32.95 ft.

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING				Monitoring Well
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)	
					Asphalt. Probable fill, mostly silt, reddish-yellow, with gravel, coarse, dry. Organic silt, black, dry.					
5	6 13 22	100	X		Silt, brown, with root casts, dry to moist.	1.3	-	-	-	
10	3 3 3	100	X		Silt, brown, with 2 inches fine-grained sand seam at 10.5 feet, saturated.	1.8	-	-	-	
15	6 7 10	100	X		Silt, dark brown, saturated.	2.7	-	-	-	
20	4 5 10	100	X		Sand, very fine-grained to silt, brown, saturated.	2.4	-	-	-	
25	2 7 8	100	X		Silt, dark grayish-brown, mottled, saturated.	1.3	-	-	-	
30	5	100	X		Sand, very fine-grained to silt, brown, saturated.	-	-	-	-	
Boring Terminated at 29.0 ft.										

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LOG OF BORING 05-002MW

Project No.:	1315-115	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	29.5 ft. BLS
Drilling Co.:	Tonto Drilling Services, Inc.	Depth To Water:	NA
Driller:	Randy Gustafson	Date Measured:	NA
Date Drilled:	08/05/94	Surface Elevation:	31.51 ft.
Drilling Method:	Hollow-Stem Auger	TOC Elevation:	31.17 ft.

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING				Monitoring Well
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)	
					Asphalt. Organic silt, black, stiff, plastic.					
5	6 9 11	100	X		Silt, olive-brown, dry to moist.	7.4	-	-	-	
10	3 4 5	100	X		Silt, greenish-gray to dark greenish-gray, low to medium plasticity, moist.	-	-	-	-	
15	5 10 15	100	X		Silt, greenish-gray, mottled with brown, stiff.	500.0	-	-	-	
	7 8	100	X		Silt, greenish-gray, stiff.	0	-	-	-	
	12	50	X		Silt to sandy silt/silty sand, greenish-gray.	-	-	-	-	
20	7 8 10 8 8	100	X		Silty sand to gravelly sand dark greenish-gray to dark gray, wet.	0	-	-	-	
25	10 13 13	100	X		Gravelly sand, olive brown, wet.	0	-	-	-	
		100	X		Gravelly sand, olive brown, wet.	-	-	-	-	
30					Boring Terminated at 29.5 ft. BLS.					

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LOG OF BORING 05-003MW

Project No.:	1315-115	Sampling Method:	California-Style Sampler
Logged By:	Bill Hughes	Depth Drilled:	28.5 ft. BLS
Drilling Co.:	Tonto Drilling Services, Inc.	Depth To Water:	NA
Driller:	Randy Gustafson	Date Measured:	NA
Date Drilled:	08/04/94	Surface Elevation:	32.09 ft.
Drilling Method:	Hollow-Stem Auger	TOC Elevation:	31.80 ft.

Depth (ft.)	Blows/6"	% Recovery	Samples	Graphic	DESCRIPTION OF MATERIALS	FIELD SCREENING				Monitoring Well
						PID (ppm)	ATHA (ppm)	BTEX (ppb)	Benzene (ppb)	
					Asphalt. Probable fill, mostly silt, brown, dry. Organic silt, black, dry.					
5	7 9 10	100	X		Silt, brown to olive brown, dry to moist.	12.1	-	-	-	
10	3 4 4	100	X		Silt, dark greenish-gray, with 2 inches sand seam at 10.4 feet, moist.	-	-	-	-	
15	5 5 6	100	X		Silt, dark greenish-gray to brown, mottled, with root casts, moist.	65.4	-	-	-	
20	2 3 7	100	X		Sand, fine to medium-grained, brown.	-	-	-	-	
25	10 10 11	100	X		Sand, coarse to gravelly sand, olive brown, saturated.	0	-	-	-	
30					Boring Terminated at 28.5 ft. BLS.					

APPENDIX D

FIELD GC SCREENING RESULTS

SECTION D.1 INTRODUCTION

This section includes the raw Gas Chromatograph (GC) data generated during the field screening of soil samples collected during the drilling of boreholes, and of groundwater samples collected concurrently with groundwater sampling. Tables D.1, D.2, D.3, and D.4 summarize the GC screening results for soil and groundwater, respectively.

Table D.1
Field GC Data Summary for Soil Samples Collected from IRP Site No. 4
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

Boring	Sample Interval (ft. BLS)	Sample Mass (grams)	Concentrations (ppb unless otherwise noted)					
			Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Total BTEX
STD BLANK	—	—	1.00 ppm	1.00 ppm	1.00 ppm	1.00 ppm	1.00 ppm	5.00 ppm
04-001BH	1.5	10	—	—	—	—	—	0
	5.5	10	—	—	—	—	—	0
	11.5	10	328	4.651 ppm	641	—	120	5.74 ppm
	15.5	10	—	21.56	—	—	—	21.56
	21.5	10	—	56.79	—	—	—	56.79
STD BLANK	—	—	1.00 ppm	1.00 ppm	1.00 ppm	1.00 ppm	1.00 ppm	5.00 ppm
04-002BH	5.5	10	—	—	—	—	—	0
	6.0	10	—	—	—	—	—	0
	10.5	10	—	—	—	—	—	0
	15.5	10	—	—	—	—	—	0
	21.5	10	—	—	—	—	—	0
STD BLANK	—	—	1.00 ppm	1.00 ppm	1.00 ppm	1.00 ppm	1.00 ppm	5.00 ppm
04-003BH	1.5	10	—	—	—	—	—	0
	6.5	10	—	—	—	—	—	0
BG-001MW	15.5	10	—	—	—	—	—	0
	20.5	10	—	20.04	—	—	—	20.04
	25.5	10	—	93.03	—	—	—	93.03
	30.5	10	—	57.00	—	—	—	57.00
STD BLANK	—	—	100	100	100	100	100	500
04-001MW	5.5	10	—	—	—	—	—	0
	10.5	10	—	—	—	—	—	0
	15.5	10	—	—	—	—	—	0
	20.5	10	—	—	—	—	—	0
	25.5	10	—	—	—	—	—	0
	28.5	10	—	—	—	—	—	0
STD BLANK	—	—	100	100	100	100	100	500
04-002MW	5.5	10	—	—	—	—	—	0
	10.5	10	—	2.29 ppm	—	—	763	3.05 ppm

Table D.1 (Concluded)
Field GC Data Summary for Soil Samples Collected from IRP Site No. 4
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

Boring	Sample Interval (ft. BLS)	Sample Mass (grams)	Concentrations (ppb unless otherwise noted)					Total BTEX
			Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	
STD BLANK	—	—	1.00 ppm	1.00 ppm	1.00 ppm	1.00 ppm	1.00 ppm	5.00 ppm
04-003BH	10.5	10	—	—	—	—	—	0
	16.5	10	—	—	—	—	—	0
	20.5	10	—	—	—	—	—	0
STD BLANK	—	—	1.00 ppm	1.00 ppm	1.00 ppm	1.00 ppm	1.00 ppm	5.00 ppm
04-004BH	1.5	10	—	—	—	—	—	0
	2.0	10	—	—	—	—	—	0
	5.5	10	—	—	—	—	—	0
	10.5	10	—	—	—	—	—	0
	15.5	10	—	—	—	—	—	0
	20.5	10	—	—	—	—	—	0
STD BLANK	—	—	1.00 ppm	1.00 ppm	1.00 ppm	1.00 ppm	1.00 ppm	5.00 ppm
BG-001MW	6.5	10	—	—	—	—	—	0
	10.5	10	190	5.912 ppm	918	—	491	7.51 ppm
	10.5	10	72.92	18.12 ppm	162	—	480	18.83 ppm ¹
	10.5	10	20	23.65 ppm	300	—	805	24.775 ppm ²
04-002MW	10.5	10	—	5.22 ppm	—	—	1.26 ppm	6.48 ppm
	10.5	10	—	4.80 ppm	—	—	744	5.54 ppm ¹
	15.5	10	—	—	—	—	—	0
	20.5	10	—	—	—	—	—	0
	25.5	10	—	—	—	—	—	0
	29.5	10	—	—	—	—	—	0

6 ppm is cutoff for dilution.
ppb — parts per billion.
ppm — parts per million.
ft. BLS — feet Below Land Surface.

BH — Borehole.
MW — Monitoring Well.
BG — Background.

STD — Standard.
¹50-microliter injection.
²20-microliter injection.

Table D.2
Field GC Data Summary for Water Samples Collected from IRP Site No. 4
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

Boring	Sample Interval (ft. BLS)	Sample Mass (ml)	Concentrations (ppb unless otherwise noted)					Total BTEX
			Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	
STD BLANK	-	-	1.00 ppm	1.00 ppm	1.00 ppm	1.00 ppm	1.00 ppm	5.00 ppm
BG-001MW	A	10	-	271	-	-	-	271
	B	10	-	304	-	-	-	304
04-001MW	A	10	-	3.6	-	-	-	3.6
	B	10	-	-	-	-	-	0
04-002MW	A	10	178	165	-	-	-	343
	B	10	-	82	17	-	-	99

ppb - parts per billion.

ppm - parts per million.

ft. BLS - feet Below Land Surface.

MW - Monitoring Well.

BG - Background.

STD - Standard.

ml - milliliter.

Table D.3
Field GC Data Summary for Soil Samples Collected from IRP Site No. 5
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

Boring	Sample Interval (ft. BLS)	Sample Mass (grams)	Concentrations (ppb unless otherwise noted)					Total BTEX
			Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	
STD BLANK	—	—	1,000	1,000	1,000	1,000	1,000	5,000
05-001RBH	1.5	10	ND	17	ND	ND	ND	17
	5.5	10	ND	112	ND	ND	ND	112
	10.5	10	240	ND	ND	ND	ND	240
	15.5	10	ND	3,820	518	ND	156	4,494
STD BLANK	—	—	1,000	1,000	1,000	1,000	1,000	5,000
05-002RBH	1.0	10	ND	ND	ND	ND	ND	ND
	5.5	10	ND	532	ND	ND	ND	532
	10.5	10	ND	7,720	834	ND	960	9,514
	10.5	10	ND	7,040	1,086	ND	708	8,834 ¹
STD BLANK	14.5	10	ND	1,240	ND	ND	ND	1,240
	—	—	1,000	952	939	932	895	4,718
05-003RBH	1.0	10	ND	ND	ND	ND	ND	ND
	5.5	10	255	1,700	9	ND	134	2,098
	10.5	10	3,210	27,000	3,400	1,000	8,300	42,910
	10.5	10	2,760	16,650	2,445	545	6,850	29,250
STD BLANK	14.5	10	888	2,470	490	160	1,420	5,428
	—	—	1,000	958	905	895	893	4,651
05-004RBH	0.5	10	38	42	ND	ND	ND	80
	5.5	10	ND	ND	ND	10,200	55,000	65,200 ²
	5.5	10	7,220	29,000	24,200	2,400	20,000	82,820 ³
	10.5	10	27,600	220,000	36,000	10,680	62,200	356,480 ³
STD BLANK	10.5	10	17,250	470,000	39,600	10,650	68,500	606,000 ⁴
	14.0	10	ND	34,000	460	ND	3,840	38,300 ³
	—	—	1,000	1,000	1,000	1,000	1,000	5,000
05-005RBH	1.0	10	677	196	18	ND	ND	891
	6.5	10	ND	ND	ND	ND	ND	ND
	15.0	10	ND	ND	ND	ND	ND	ND
	20.0	10	ND	ND	ND	ND	ND	ND
STD BLANK	—	—	100	100	100	100	100	500

Table D.3 (Concluded)
Field GC Data Summary for Soil Samples Collected from IRP Site No. 5
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

Boring	Sample Interval (ft. BLS)	Sample Mass (grams)	Concentrations (ppb unless otherwise noted)					Total BTEX
			Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	
05-001MW	5.5	10	ND	ND	ND	ND	ND	ND
	10.5	10	ND	ND	ND	ND	ND	ND
	15.5	10	ND	ND	ND	ND	ND	ND
	20.5	10	ND	ND	ND	ND	ND	ND
	25.5	10	ND	ND	ND	ND	ND	ND
STD BLANK	—	—	1,000	1,000	1,000	1,000	1,000	5,000
05-002MW	5.5	10	ND	56	3.06	ND	ND	59.06
	10.5	10	127	9,790	35,290	885	5,560	51,652
	10.5	10	25	8,000	6,100	1,115	8,850	24,090 ²
	15.5	10	ND	283	12	ND	72	367
	20.5	10	ND	85	ND	ND	ND	85
	25.5	10	ND	12	ND	ND	ND	12
STD BLANK	—	—	1,000	1,000	1,000	1,000	1,000	5,000
05-003MW	5.5	10	ND	78.86	ND	ND	ND	78.86
	10.5	10	ND	350.4	ND	ND	ND	350.4
	15.5	10	434	7,850	549	5.15	195.41	9,034
	15.5	10	470	5,280	532	4.5	200	6,486.5 ¹
	20.5	10	57	771	83	ND	32	943
	25.5	10	5	204	ND	ND	ND	209

ppb — parts per billion.
BH — Borehole.
ND — Non-Detect.
ft. BLS — feet Below Land Surface.

MW — Monitoring Well.
STD — Standard.
¹2 to 1 injection.

²5 to 1 injection.
³20 to 1 injection.
⁴50 to 1 injection.

Table D.4
Field GC Data Summary for Water Samples Collected from IRP Site No. 5
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

Boring	Sample Interval (ft. BLS)	Sample Mass (ml)	Concentrations (ppb unless otherwise noted)					Total BTEX
			Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	
STD BLANK	—	—	1,000	1,000	1,000	1,000	1,000	5,000
05-001MW	A	10	ND	ND	ND	ND	ND	ND
	B	10	ND	ND	ND	ND	ND	ND
05-002MW	A	10	12	147	5	ND	ND	164
	B	10	ND	136	7	ND	ND	143
05-003MW	A	10	6	260	ND	ND	ND	266
	B	10	4	229	ND	ND	ND	233

ppb — parts per billion.
MW — Monitoring Well.

STD — Standard.
ft. BLS — feet Below Land Surface.

ml — milliliter.

04-002BH 10.5FT

PHOTOVAC

START

2

STOP 9 500.0
SAMPLE LIBRARY 1 JUL 28 1994 11:48
ANALYSIS # 12 PARK ESCOBAR
INTERNAL TEMP 23 HAYWARD ANG
GRAIN 2 04-002BH 10.5FT

COMPOUND NAME PEAK R.T. AREA/PPM
UNKNOWN 1 22.4 1.1 US
UNKNOWN 2 23.5 1.0 US

04-002BH 15.5FT

PHOTOVAC

START

2

STOP 9 500.0
SAMPLE LIBRARY 1 JUL 28 1994 11:57
ANALYSIS # 13 PARK ESCOBAR
INTERNAL TEMP 23 HAYWARD ANG
GRAIN 2 04-002BH 15.5FT

COMPOUND NAME PEAK R.T. AREA/PPM
UNKNOWN 1 26.9 186.5 MUS
UNKNOWN 2 23.2 181.4 MUS

04-002BH 21.5FT

PHOTOVAC

START

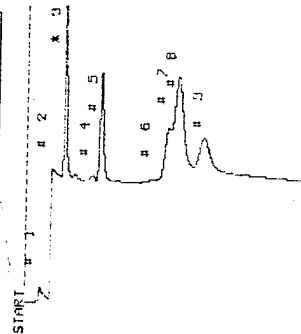
2

STOP 9 500.0
SAMPLE LIBRARY 1 JUL 28 1994 12: 6
ANALYSIS # 14 PARK ESCOBAR
INTERNAL TEMP 30 HAYWARD ANG
GRAIN 2 04-002BH 21.5FT

COMPOUND NAME PEAK R.T. AREA/PPM
UNKNOWN 1 26.4 1.3 US
UNKNOWN 2 22.1 512.3 MUS

100 PPB STD

PHOTOVAC



STOP # 450.0
SAMPLE LIBRARY 1 AUG 3 1994 9:17
ANALYSIS # 1 MARK ESCOBAR
INTERNAL TEMP 27 HAYWARD ANGUS
GAIN 10 100 PPB STD

COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	2	44.2	644.5 mUS
UNKNOWN	3	63.9	2.7 US
UNKNOWN	4	111.4	62.2 mUS
UNKNOWN	5	124.6	2.2 US
UNKNOWN	7	231.6	1.8 US
UNKNOWN	8	247.2	5.2 US
UNKNOWN	9	289.1	1.6 US

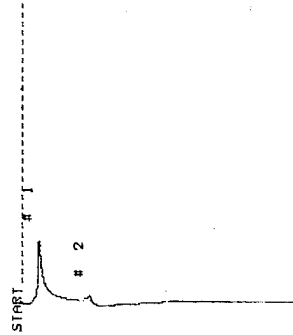
*GAIN WAS ADJUSTED
DURING ANALYSIS
FROM 2 TO 10

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
BENZENE	1	63.9	100.0 PPB	
TOLUENE	2	123.6	100.0 PPB	
ETHYLBENZENE	3	231.6	100.0 PPB	
MP XYLENE	4	247.2	100.0 PPB	
O XYLENE	5	289.1	100.0 PPB	

BLANK

PHOTOVAC

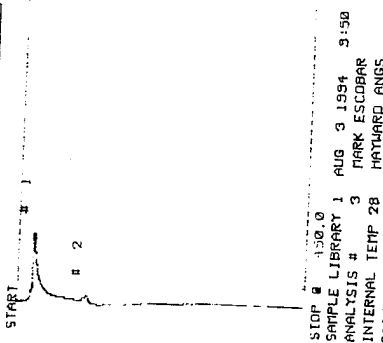


STOP # 450.0
SAMPLE LIBRARY 1 AUG 3 1994 9:17
ANALYSIS # 2 MARK ESCOBAR
INTERNAL TEMP 28 HAYWARD ANGUS
GAIN 10 BLANK

COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	29.4	427.3 mUS
UNKNOWN	2	111.4	132.0 mUS

04-001MW 5.5FT

PHOTOVAC

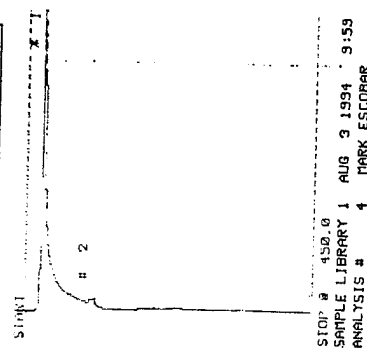


STOP # 450.0
SAMPLE LIBRARY 1 AUG 3 1994 9:50
ANALYSIS # 3 MARK ESCOBAR
INTERNAL TEMP 28 HAYWARD ANGUS
GAIN 10 04-001MW 5.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	26.6	523.4 mUS
UNKNOWN	2	111.4	122.5 mUS

04-001MW 10.5FT

PHOTOVAC

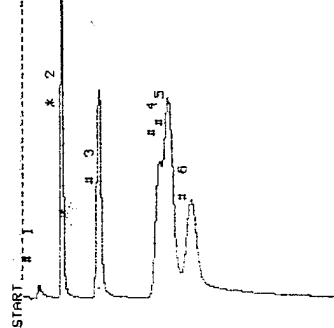


STOP # 450.0
SAMPLE LIBRARY 1 AUG 3 1994 9:55
ANALYSIS # 4 MARK ESCOBAR
INTERNAL TEMP 28 HAYWARD ANGUS
GAIN 10 04-001MW 10.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	26.8	5.8 US
UNKNOWN	2	111.4	130.1 mUS

1 PPM STD

PHOTOVAC



STOP # 500.0
SAMPLE LIBRARY 1 JUL 28 1994 9:47
ANALYSIS # 2 MARK ESCOBAR
INTERNAL TEMP 28 HAYWARD ANG
GAIN 2 1 PPM STD

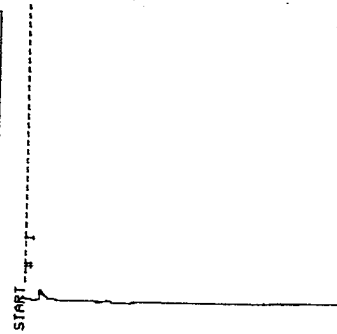
COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	28.3	26.1
UNKNOWN	2	64.6	5.7
UNKNOWN	3	124.4	5.2
UNKNOWN	4	228.2	4.8
UNKNOWN	5	233.4	10.7
UNKNOWN	6	263.6	6.4

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
	BENZENE	1	64.6	1.000 PPM
	TOLUENE	2	124.4	1.000 PPM
	ETHYLBENZENE	3	228.2	1.000 PPM
	MP XYLENE	4	233.4	1.000 PPM
	D XYLENE	5	263.6	1.000 PPM

BLANK

PHOTOVAC

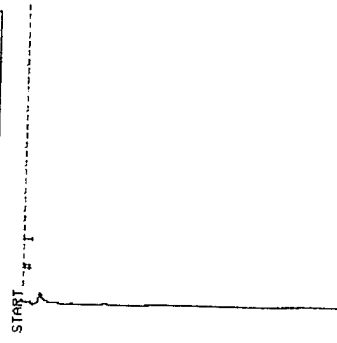


STOP # 500.0
SAMPLE LIBRARY 1 JUL 28 1994 11:10
ANALYSIS # 8 MARK ESCOBAR
INTERNAL TEMP 28 HAYWARD ANG
GAIN 2 BLANK

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	26.7	20.3

04-002BH 6INCH

PHOTOVAC

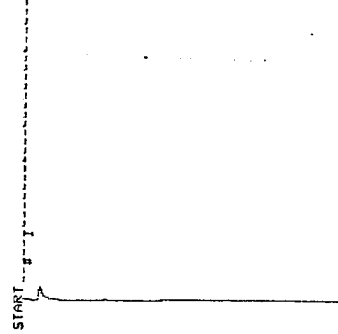


STOP # 500.0
SAMPLE LIBRARY 1 JUL 28 1994 11:19
ANALYSIS # 9 MARK ESCOBAR
INTERNAL TEMP 23 HAYWARD ANG
GAIN 2 04-002BH 6INCH

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	27.3	20.4

04-002BH 5.5FT

PHOTOVAC

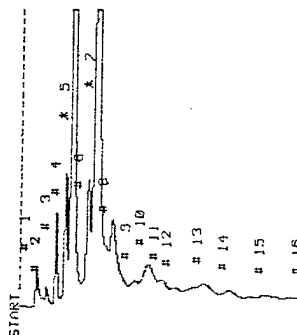


STOP # 500.0
SAMPLE LIBRARY 1 JUL 28 1994 11:29
ANALYSIS # 10 MARK ESCOBAR
INTERNAL TEMP 23 HAYWARD ANG
GAIN 2 04-002BH 5.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	27.6	22.6

04-001BH 11.5FT

PHOTOVAC

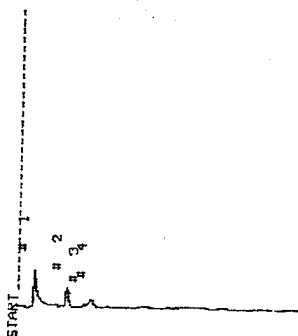


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 28 1994 13:44
 ANALYSIS # 21 MARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANG
 GAIN 2 04-001BH 11.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	27.8	212.9
UNKNOWN	2	43.2	29.4
UNKNOWN	3	58.5	1.0
BENZENE	4	72.2	328.3
UNKNOWN	5	82.0	13.5
UNKNOWN	6	108.7	2.6
TOLUENE	7	120.1	4.851
UNKNOWN	8	142.6	3.7
UNKNOWN	9	182.7	220.2
ETHYLBENZENE	10	204.0	516.3
ETHYLBENZENE	11	225.0	124.5
O XYLENE	13	233.1	120.1
UNKNOWN	14	334.0	186.6
UNKNOWN	15	332.2	101.2

04-001BH 15.5FT

PHOTOVAC

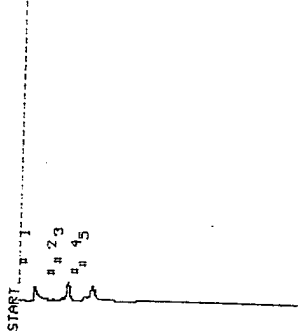


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 28 1994 13:36
 ANALYSIS # 22 MARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANG
 GAIN 2 04-001BH 15.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	27.6	232.8
UNKNOWN	2	29.3	263.2
UNKNOWN	3	106.9	12.4
TOLUENE	4	112.4	21.56

04-001BH 21FT

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 JUL 28 1994 14:41
 ANALYSIS # 23 MARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANG
 GAIN 2 04-001BH 21FT

COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	27.1	33.5
UNKNOWN	3	28.9	262.4
UNKNOWN	4	106.3	28.3
TOLUENE	5	112.1	56.29

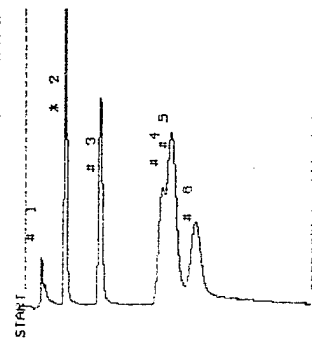
1 PPM STD

BLANK

04-001BH 1.5FT

04-001BH 5.5FT

PHOTOVAC



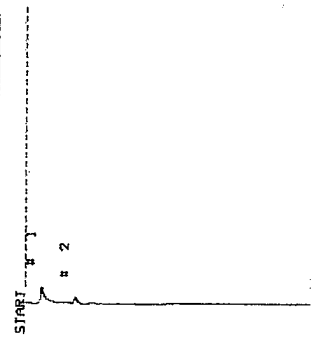
STOP # 450.0
 SAMPLE LIBRARY 1 JUL 28 1994 12:35
 ANALYSIS # 17 MARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANG'S
 GAIN 2 1 PPM STD

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	28.6	324.8
UNKNOWN	2	65.5	5.3
UNKNOWN	3	122.0	4.5
UNKNOWN	4	223.8	4.4
UNKNOWN	5	237.6	9.4
0 XYLENE	6	276.6	876.2

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
BENZENE	1	85.5	1.000	PPM
TOLUENE	2	122.0	1.000	PPM
ETHYLBENZENE	3	223.8	1.000	PPM
MP XYLENE	4	237.6	1.000	PPM
O XYLENE	5	276.6	1.000	PPM

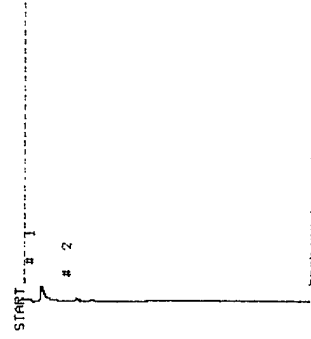
PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 JUL 28 1994 12:45
 ANALYSIS # 18 MARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANG'S
 GAIN 2 BLANK

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	28.2	33.3
UNKNOWN	2	82.9	62.5

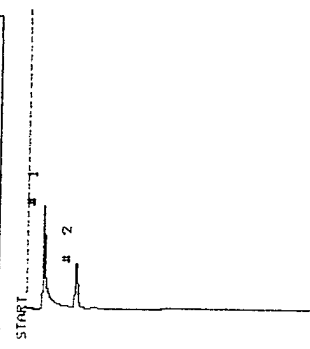
PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 JUL 28 1994 13:26
 ANALYSIS # 19 MARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANG'S
 GAIN 2 04-001BH 1.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	29.1	30.3
UNKNOWN	2	85.0	20.5

PHOTOVAC

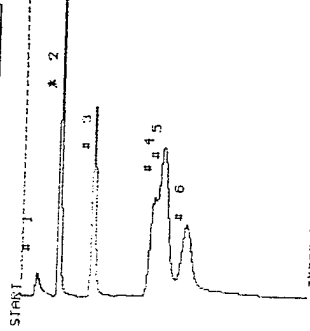


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 28 1994 13:34
 ANALYSIS # 20 MARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANG'S
 GAIN 2 04-001BH 5.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	28.0	219.9
UNKNOWN	2	81.1	650.2

1 PPM STD

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 JUL 28 1994 16: 6
 ANALYSIS # 30 MARK ESCOBAR
 INTERNAL TEMP 32 HAYWARD ANGUS
 GAIN 2 1 PPM STD

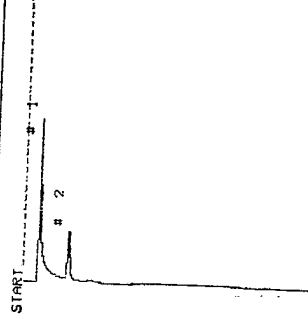
COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	26.1	35.6 PPM
BENZENE	2	59.9	988.1 PPM
TOLUENE	3	114.7	946.6 PPM
ETHYLBENZENE	4	213.6	906.2 PPM
MP XYLENE	5	226.8	927.0 PPM
O XYLENE	6	264.7	875.5 PPM

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
	BENZENE	1	26.1	1.000 PPM
	BENZENE	2	59.9	1.000 PPM
	TOLUENE	3	114.7	1.000 PPM
	ETHYLBENZENE	4	213.6	1.000 PPM
	MP XYLENE	5	226.8	1.000 PPM
	O XYLENE	6	264.7	1.000 PPM

BLANK

PHOTOVAC

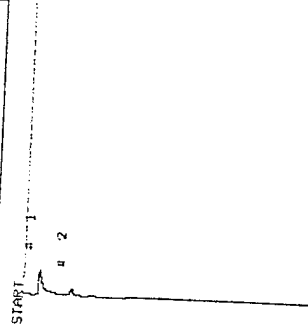


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 28 1994 16:17
 ANALYSIS # 31 MARK ESCOBAR
 INTERNAL TEMP 32 HAYWARD ANGUS
 GAIN 2 BLANK

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.2	1.3 US
UNKNOWN	2	23.1	644.6 PPM

04-004BH 1.5FT

PHOTOVAC

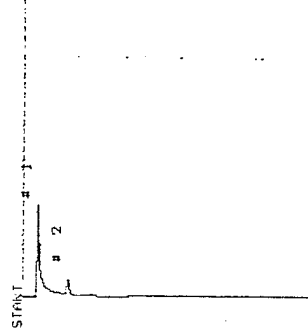


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 28 1994 16:25
 ANALYSIS # 32 MARK ESCOBAR
 INTERNAL TEMP 32 HAYWARD ANGUS
 GAIN 2 04-004BH 1.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	22.1	108.5 PPM
UNKNOWN	2	22.3	62.2 PPM

04-004BH 2FT

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 JUL 28 1994 16:33
 ANALYSIS # 33 MARK ESCOBAR
 INTERNAL TEMP 32 HAYWARD ANGUS
 GAIN 2 04-004BH 2FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.1	868.4 PPM
UNKNOWN	2	22.5	173.8 PPM

04-004BH 10.5FT

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 JUL 28 1994 16:53
 ANALYSIS # 1 MARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANGUS
 GAIN 2 04-004BH 10.5FT

COMPOUND NAME PEAK R.T. AREA/PPH
 UNKNOWN 1 22.6 222.1 μS
 UNKNOWN 2 29.3 20.1 μS

04-004BH 2FT

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 JUL 28 1994 16:42
 ANALYSIS # 34 MARK ESCOBAR
 INTERNAL TEMP 32 HAYWARD ANGUS
 GAIN 2 04-004BH 2FT

COMPOUND NAME PEAK R.T. AREA/PPH
 UNKNOWN 1 26.0 2.2 US
 UNKNOWN 2 24.2 380.8 μS

04-004BH 15.5FT

PHOTOVAC

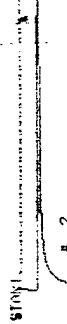


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 28 1994 17:2
 ANALYSIS # 2 MARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANGUS
 GAIN 2 04-004BH 15.5FT

COMPOUND NAME PEAK R.T. AREA/PPH
 UNKNOWN 1 28.3 486.8 μS
 UNKNOWN 2 82.6 129.4 μS

04-004BH 20.5FT

PHOTOVAC

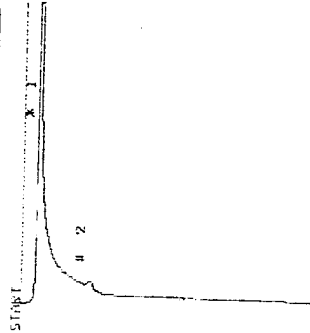


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 28 1994 17:10
 ANALYSIS # 3 MARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANGUS
 GAIN 2 04-004BH 20.5FT

COMPOUND NAME PEAK R.T. AREA/PPH
 UNKNOWN 1 29.6 4.2 US
 UNKNOWN 2 88.3 286.2 μS

04-001MW 15.5FT

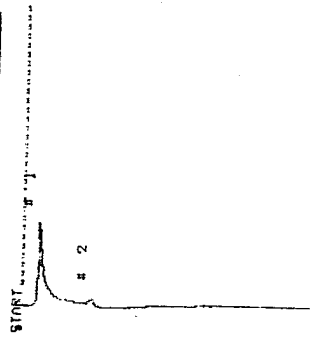
PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 3 1994 10:7
 ANALYSIS # 5 MARK ESCOBAR
 INTERNAL TEMP 28 MATUARD ANGUS
 GAIN 10 04-001MW 15.5FT
 COMPOUND NAME PEAK R.T. AREA/PPH
 UNKNOWN 1 22.3 11.6 US
 UNKNOWN 2 111.4 134.9 MUS

04-001MW 20.5FT

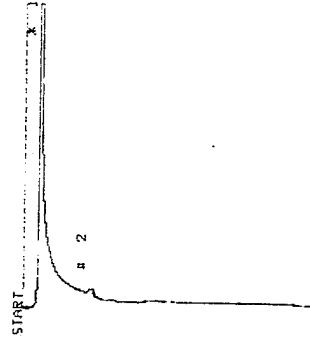
PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 3 1994 10:41
 ANALYSIS # 6 MARK ESCOBAR
 INTERNAL TEMP 28 MATUARD ANGUS
 GAIN 10 04-001MW 20.5FT
 COMPOUND NAME PEAK R.T. AREA/PPH
 UNKNOWN 1 26.4 341.0 MUS
 UNKNOWN 2 111.4 125.2 MUS

04-001MW 25.5FT

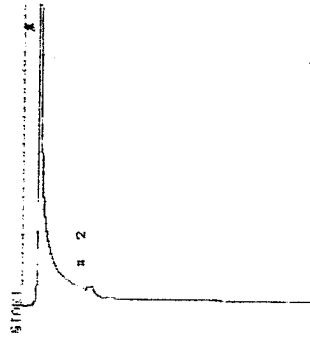
PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 3 1994 10:49
 ANALYSIS # 7 MARK ESCOBAR
 INTERNAL TEMP 28 MATUARD ANGUS
 GAIN 10 04-001MW 25.5FT
 COMPOUND NAME PEAK R.T. AREA/PPH
 UNKNOWN 1 27.1 2.7 US
 UNKNOWN 2 111.4 131.2 MUS

04-004MW 28.5FT

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 3 1994 10:58
 ANALYSIS # 8 MARK ESCOBAR
 INTERNAL TEMP 28 MATUARD ANGUS
 GAIN 10 04-004MW 28.5FT
 COMPOUND NAME PEAK R.T. AREA/PPH
 UNKNOWN 1 27.0 2.2 US
 UNKNOWN 2 111.4 123.2 MUS

04-003BH 16.5FT

PHOTOVAC

START

2

STOP # 450.0
SAMPLE LIBRARY 1 JUL 28 1994 15:32
ANALYSIS # 28 MARK ESCOBAR
INTERNAL TEMP 32 HAYWARD ANG'S
GAIN 2 04-003BH 16.5FT
COMPOUND NAME PEAK R.T. AREA/PPM
UNKNOWN 1 22.4 1.0 US
UNKNOWN 2 23.1 222.8 PUS

04-003BH 20.5FT

PHOTOVAC

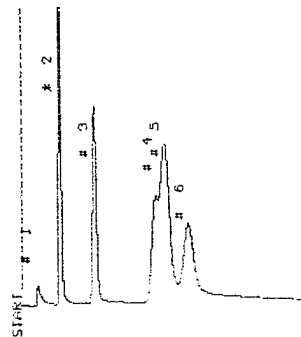
START

2

STOP # 450.0
SAMPLE LIBRARY 1 JUL 28 1994 15:57
ANALYSIS # 29 MARK ESCOBAR
INTERNAL TEMP 31 HAYWARD ANG'S
GAIN 2 04-003BH 20.5FT
COMPOUND NAME PEAK R.T. AREA/PPM
UNKNOWN 1 22.8 162.4 PUS
UNKNOWN 2 20.2 36.8 PUS

1 PPM STD

PHOTOVAC



STOP # 450.0
SAMPLE LIBRARY 1 JUL 28 1994 14:48
ANALYSIS # 24 MARK ESCOBAR
INTERNAL TEMP 31 HAYWARD ANGUS
GAIN 2 1 PPM STD

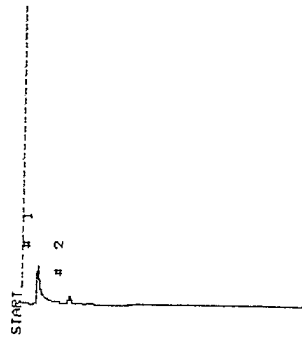
COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	22.4	49.3 μS
BENZENE	2	62.5	317.2 PPM
TOLUENE	3	118.0	304.7 PPM
ETHYL BENZENE	4	218.4	854.2 PPM
MP XYLENE	5	231.8	893.4 PPM
P XYLENE	6	253.0	834.8 PPM

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
	BENZENE	1	62.5	1.000 PPM
	TOLUENE	2	118.0	1.000 PPM
	ETHYL BENZENE	3	218.4	1.000 PPM
	MP XYLENE	4	231.8	1.000 PPM
	P XYLENE	5	253.0	1.000 PPM

BLANK

PHOTOVAC

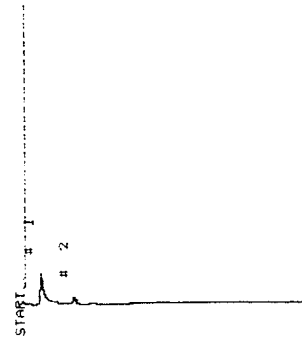


STOP # 450.0
SAMPLE LIBRARY 1 JUL 28 1994 15:0
ANALYSIS # 25 MARK ESCOBAR
INTERNAL TEMP 31 HAYWARD ANGUS
GAIN 2 BLANK

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	22.2	247.5 μS
UNKNOWN	2	22.7	76.7 μS

04-003BH 1.5FT

PHOTOVAC

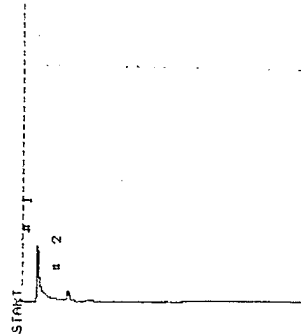


STOP # 450.0
SAMPLE LIBRARY 1 JUL 28 1994 15:15
ANALYSIS # 26 MARK ESCOBAR
INTERNAL TEMP 31 HAYWARD ANGUS
GAIN 2 04-003BH 1.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	22.8	132.5 μS
UNKNOWN	2	81.1	53.6 μS

04-003BH 10.5FT

PHOTOVAC

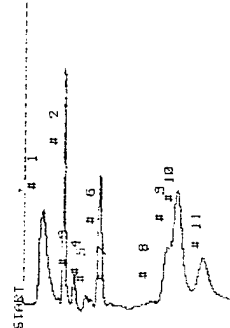


STOP # 450.0
SAMPLE LIBRARY 1 JUL 28 1994 15:24
ANALYSIS # 27 MARK ESCOBAR
INTERNAL TEMP 31 HAYWARD ANGUS
GAIN 2 04-003BH 10.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	26.1	377.5 μS
UNKNOWN	2	75.3	98.6 μS

100 PPB STD

PHOTOVAC



STOP # 450.0
SAMPLE LIBRARY 1 AUG 2 1994 8:44
ANALYSIS # 5 MARK ESCOBAR
INTERNAL TEMP 27 HAYWARD ANGUS
GAIN 10 100 PPB STD

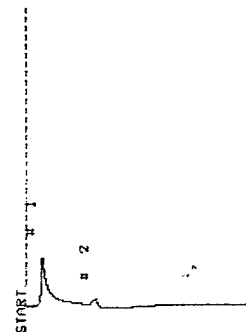
COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	31.2	1.2 US
UNKNOWN	2	65.5	2.3 US
UNKNOWN	3	83.2	544.6 mUS
UNKNOWN	4	102.1	176.0 mUS
UNKNOWN	6	124.8	2.7 US
UNKNOWN	8	207.4	503.3 mUS
UNKNOWN	9	231.4	2.3 US
UNKNOWN	10	248.6	2.8 US
UNKNOWN	11	280.2	3.8 US

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
BENZENE	1	65.5	100.0 PPB	
TOLUENE	2	124.8	100.0 PPB	
ETHYLBENZENE	3	233.4	1.000 PPM	
ETHYLBENZENE	4	233.4	100.0 PPB	
HP XYLENE	5	248.6	100.0 PPB	
O XYLENE	6	280.2	100.0 PPB	

BLANK

PHOTOVAC

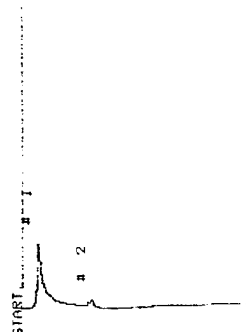


STOP # 450.0
SAMPLE LIBRARY 1 AUG 2 1994 8:57
ANALYSIS # 6 MARK ESCOBAR
INTERNAL TEMP 27 HAYWARD ANGUS
GAIN 10 BLANK

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	26.6	342.3 mUS
UNKNOWN	2	111.2	156.1 mUS

04-002MW 5.5FT

PHOTOVAC



STOP # 450.0
SAMPLE LIBRARY 1 AUG 2 1994 10:27
ANALYSIS # 7 MARK ESCOBAR
INTERNAL TEMP 27 HAYWARD ANGUS
GAIN 10 04-002MW 5.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	26.6	431.5 mUS
UNKNOWN	2	111.2	132.3 mUS

04-002MW 10.5FT

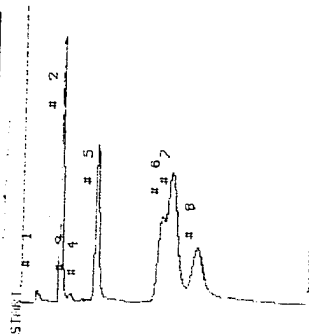
PHOTOVAC



STOP # 450.0
SAMPLE LIBRARY 1 AUG 2 1994 10:46
ANALYSIS # 8 MARK ESCOBAR
INTERNAL TEMP 28 HAYWARD ANGUS
GAIN 10 04-002MW 10.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	26.6	1.0 US
UNKNOWN	2	31.5	6.0 US
UNKNOWN	3	36.6	650.6 mUS
UNKNOWN	4	45.5	30.2 US
UNKNOWN	5	56.8	8.3 US
UNKNOWN	6	76.3	63.7 US
TOLUENE	7	118.2	2.286 PPM
UNKNOWN	8	164.2	13.0 US
UNKNOWN	9	201.6	26.4 US
O XYLENE	10	272.4	263.8 PPB
UNKNOWN	11	343.3	3.9 US

PHOTOVAC



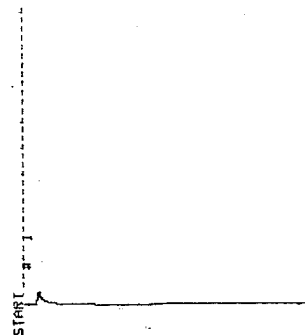
STUP # 450.0
SAMPLE LIBRARY 1 AUG 2 1994 11:7
ANALYSIS # 11 MARK ESCOBAR
INTERNAL TEMP 28 HAYWARD ANG
GAIN 2 1 PPM STD

CURVED: MOLE	FEWK	N.T.	ORLEN/PIPI
UNK/UNKN	1	26.2	25.2 mUS
UNK/UNKN	2	63.2	3.2 US
UNK/UNKN	3	80.2	69.1 mUS
UNK/UNKN	4	59.1	21.2 mUS
UNK/UNKN	5	121.6	3.5 US
UNK/UNKN	6	220.6	3.2 US
UNK/UNKN	7	243.2	2.4 US
UNK/UNKN	8	246.3	3.2 US

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
	BENZENE	1	63.7	1.000 PPM
	TOLUENE	2	121.8	1.000 PPM
	ETHYLBENZENE	3	228.6	1.000 PPM
	PROP XYLENE	4	243.7	1.000 PPM
	OD XYLENE	5	284.3	1.000 PPM

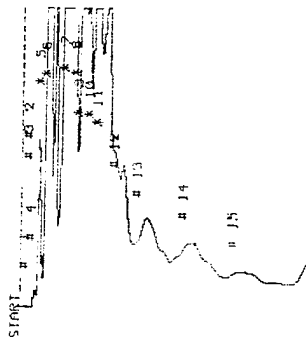
PHOTOVAC



STOP @ 450.0
SAMPLE LIBRARY 1 AUG 2 1994 11:17
ANALYSIS # 12 MARK ESCOBAR
INTERNAL TEMP 28 HAYWARD ANGUS
GAIN 2 BLANK

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.0	20.6 μVS

PHOTOVAC



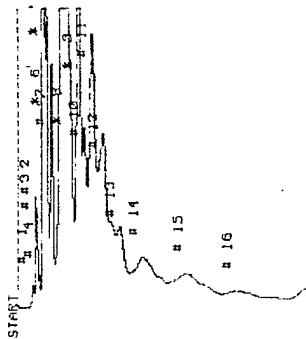
STOP @ 450.0
SAMPLE LIBRARY 1 AUG 2 1994 11:26
ANALYSIS # 13 MARK ESCOBAR
INTERNAL TEMP 28 HAYWARD ANGUS
GAIN 2 ~~150000~~

~~10-01-01~~ 01-002mW 10.5

COMPOUND NAME	PLATE	R _T	AREA/PERC
1	1	1.1	1.1
2	1	1.2	1.2
3	1	1.3	1.3
4	1	1.4	1.4
5	1	1.5	1.5
6	1	1.6	1.6
7	1	1.7	1.7
8	1	1.8	1.8
9	1	1.9	1.9
10	1	2.0	2.0
11	1	2.1	2.1
12	1	2.2	2.2
13	1	2.3	2.3
14	1	2.4	2.4
15	1	2.5	2.5
16	1	2.6	2.6
17	1	2.7	2.7
18	1	2.8	2.8
19	1	2.9	2.9
20	1	3.0	3.0
21	1	3.1	3.1
22	1	3.2	3.2
23	1	3.3	3.3
24	1	3.4	3.4
25	1	3.5	3.5
26	1	3.6	3.6
27	1	3.7	3.7
28	1	3.8	3.8
29	1	3.9	3.9
30	1	4.0	4.0
31	1	4.1	4.1
32	1	4.2	4.2
33	1	4.3	4.3
34	1	4.4	4.4
35	1	4.5	4.5
36	1	4.6	4.6
37	1	4.7	4.7
38	1	4.8	4.8
39	1	4.9	4.9
40	1	5.0	5.0
41	1	5.1	5.1
42	1	5.2	5.2
43	1	5.3	5.3
44	1	5.4	5.4
45	1	5.5	5.5
46	1	5.6	5.6
47	1	5.7	5.7
48	1	5.8	5.8
49	1	5.9	5.9
50	1	6.0	6.0
51	1	6.1	6.1
52	1	6.2	6.2
53	1	6.3	6.3
54	1	6.4	6.4
55	1	6.5	6.5
56	1	6.6	6.6
57	1	6.7	6.7
58	1	6.8	6.8
59	1	6.9	6.9
60	1	7.0	7.0
61	1	7.1	7.1
62	1	7.2	7.2
63	1	7.3	7.3
64	1	7.4	7.4
65	1	7.5	7.5
66	1	7.6	7.6
67	1	7.7	7.7
68	1	7.8	7.8
69	1	7.9	7.9
70	1	8.0	8.0
71	1	8.1	8.1
72	1	8.2	8.2
73	1	8.3	8.3
74	1	8.4	8.4
75	1	8.5	8.5
76	1	8.6	8.6
77	1	8.7	8.7
78	1	8.8	8.8
79	1	8.9	8.9
80	1	9.0	9.0
81	1	9.1	9.1
82	1	9.2	9.2
83	1	9.3	9.3
84	1	9.4	9.4
85	1	9.5	9.5
86	1	9.6	9.6
87	1	9.7	9.7
88	1	9.8	9.8
89	1	9.9	9.9
90	1	10.0	10.0
91	1	10.1	10.1
92	1	10.2	10.2
93	1	10.3	10.3
94	1	10.4	10.4
95	1	10.5	10.5
96	1	10.6	10.6
97	1	10.7	10.7
98	1	10.8	10.8
99	1	10.9	10.9
100	1	11.0	11.0

UNK-0000	1	26.5	43.5	mU's
UNK-0000	2	31.0	332.1	mU's
UNK-0000	3	32.2	262.2	mU's
UNK-0000	4	45.2	29.3	U's
UNK-0000	5	55.9	6.1	U's
UNK-0000	6	78.0	66.6	U's
UNK-0000	8	38.2	17.4	U's
UNK-0000	9	106.8	5.9	U's
TOLUENE	10	413.7	5.223	PPM
UNK-0000	11	135.9	15.8	U's
UNK-0000	12	164.2	4.3	U's
UNK-0000	13	202.4	6.3	U's
0 XYLENE	14	271.0	1.263	PPM
UNK-0000	15	347.5	894.0	mU's

PHOTOVAC



STOP @ 450.0
SAMPLE LIBRARY 1 AUG 2 1994 11:35
ANALYSIS # 14 MARK ESCOBAR
INTERNAL TEMP 28 HAYWARD ANGUS
GAIN 2 4-21W 10.5 50UL

COMPOUND NAME	PEAK	R.T.	AREA/PPM
1	1	1.12	1.00
2	2	1.12	1.00
3	3	1.12	1.00
4	4	1.12	1.00
5	5	1.12	1.00
6	6	1.12	1.00
7	7	1.12	1.00
8	8	1.12	1.00
9	9	1.12	1.00
10	10	1.12	1.00
11	11	1.12	1.00
12	12	1.12	1.00
13	13	1.12	1.00
14	14	1.12	1.00
15	15	1.12	1.00
16	16	1.12	1.00
17	17	1.12	1.00
18	18	1.12	1.00
19	19	1.12	1.00
20	20	1.12	1.00
21	21	1.12	1.00
22	22	1.12	1.00
23	23	1.12	1.00
24	24	1.12	1.00
25	25	1.12	1.00
26	26	1.12	1.00
27	27	1.12	1.00
28	28	1.12	1.00
29	29	1.12	1.00
30	30	1.12	1.00
31	31	1.12	1.00
32	32	1.12	1.00
33	33	1.12	1.00
34	34	1.12	1.00
35	35	1.12	1.00
36	36	1.12	1.00
37	37	1.12	1.00
38	38	1.12	1.00
39	39	1.12	1.00
40	40	1.12	1.00
41	41	1.12	1.00
42	42	1.12	1.00
43	43	1.12	1.00
44	44	1.12	1.00
45	45	1.12	1.00
46	46	1.12	1.00
47	47	1.12	1.00
48	48	1.12	1.00
49	49	1.12	1.00
50	50	1.12	1.00
51	51	1.12	1.00
52	52	1.12	1.00
53	53	1.12	1.00
54	54	1.12	1.00
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64	64	1.12	1.00
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66	66	1.12	1.00
67	67	1.12	1.00
68	68	1.12	1.00
69	69	1.12	1.00
70	70	1.12	1.00
71	71	1.12	1.00
72	72	1.12	1.00
73	73	1.12	1.00
74	74	1.12	1.00
75	75	1.12	1.00
76	76	1.12	1.00
77	77	1.12	1.00
78	78	1.12	1.00
79	79	1.12	1.00
80	80	1.12	1.00
81	81	1.12	1.00
82	82	1.12	1.00
83	83	1.12	1.00
84	84	1.12	1.00
85	85	1.12	1.00
86	86	1.12	1.00
87	87	1.12	1.00
88	88	1.12	1.00
89	89	1.12	1.00
90	90	1.12	1.00
91	91	1.12	1.00
92	92	1.12	1.00
93	93	1.12	1.00
94	94	1.12	1.00
95	9		

UNIKLINIKUM	1	28.5	80.0	mUS
UNIKLINIKUM	2	30.5	52.0	mUS
UNIKLINIKUM	3	32.6	418.0	mUS
UNIKLINIKUM	4	43.3	9.7	US
UNIKLINIKUM	5	48.6	2.7	US
UNIKLINIKUM	6	56.5	3.6	US
UNIKLINIKUM	7	76.0	47.0	US
UNIKLINIKUM	8	98.0	9.1	US
UNIKLINIKUM	9	107.5	2.382	PPH
UNIKLINIKUM	10	113.6	2.382	PPH
UNIKLINIKUM	11	127.6	4.6	US
UNIKLINIKUM	12	163.7	115.7	mUS
UNIKLINIKUM	13	199.8	1.3	US
UNIKLINIKUM	14	268.3	322.3	PPH
UNIKLINIKUM	15	345.7	405.6	mUS
UNIKLINIKUM	16			
UNIKLINIKUM	17			
UNIKLINIKUM	18			
UNIKLINIKUM	19			
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UNIKLINIKUM	91			
UNIKLINIKUM	92			
UNIKLINIKUM	93			
UNIKLINIKUM	94			
UNIKLINIKUM	95			
UNIKLINIKUM				

04-002MW 15.5FT

PHOTOVAC

START

STOP # 450.0
SAMPLE LIBRARY 1 AUG 2 1994 12:28
ANALYSIS # 15 MARK ESCOBAR
INTERNAL TEMP 28 HAYWARD ANG
GAIN 2 04-002MW 15.5FT
COMPOUND NAME PEAK R.T. AREA/PPH
UNKNOWN 1 25.3 71.8 mUS

04-002MW 20.5FT

PHOTOVAC

START

STOP # 450.0
SAMPLE LIBRARY 1 AUG 2 1994 12:44
ANALYSIS # 16 MARK ESCOBAR
INTERNAL TEMP 29 HAYWARD ANG
GAIN 2 04-002MW 20.5FT
COMPOUND NAME PEAK R.T. AREA/PPH
UNKNOWN 1 26.2 32.1 mUS

04-002MW 25.5FT

PHOTOVAC

START

STOP # 450.0
SAMPLE LIBRARY 1 AUG 2 1994 13:25
ANALYSIS # 18 MARK ESCOBAR
INTERNAL TEMP 30 HAYWARD ANG
GAIN 2 04-002MW 25.5FT
COMPOUND NAME PEAK R.T. AREA/PPH
UNKNOWN 1 26.4 32.2 mUS

04-002MW 29.5FT

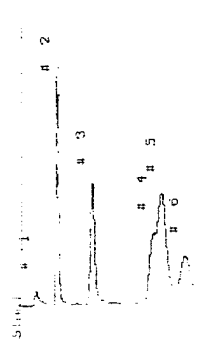
PHOTOVAC

START

STOP # 450.0
SAMPLE LIBRARY 1 AUG 2 1994 13:16
ANALYSIS # 17 MARK ESCOBAR
INTERNAL TEMP 29 HAYWARD ANG
GAIN 2 04-002MW 29.5FT
COMPOUND NAME PEAK R.T. AREA/PPH
UNKNOWN 1 25.9 32.0 mUS

1 PPM STD

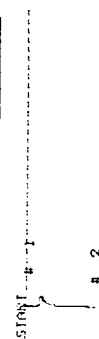
PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 10 1994 10:19
 ANALYSIS # 18 MARK ESCOBAR
 INTERNAL TEMP 30 1 PPM STD
 GAIN 2
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 20.2 210.1 mUs
 UNKNOWN 2 32.0 3.1 mUs
 UNKNOWN 3 112.2 2.0 mUs
 UNKNOWN 4 210.1 2.2 mUs
 UNKNOWN 5 243.1 6.0 mUs
 UNKNOWN 6 269.6 3.1 mUs

BLANK

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 10 1994 10:18
 ANALYSIS # 19 MARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANGUS
 GAIN 2
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 24.9 129.0 mUs
 UNKNOWN 2 129.9 15.4 mUs

04-001MW A

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 10 1994 10:35
 ANALYSIS # 21 MARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANGUS
 GAIN 2
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 25.2 122.1 mUs
 UNKNOWN 2 129.9 13.8 mUs

04-001MW B

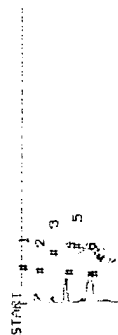
PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 10 1994 10:51
 ANALYSIS # 23 MARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANGUS
 GAIN 2
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 25.2 335.1 mUs
 UNKNOWN 2 22.1 30.6 mUs
 UNKNOWN 3 129.9 12.0 mUs

BG-001MW A

PHOTOVAC



STOP # 450.0

SAMPLE LIBRARY 1 AUG 10 1994 14:30

ANALYSIS # 24 MARK ESCOBAR

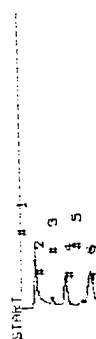
INTERNAL TEMP 30 HAYWARD ANG

GAIN 2 BG-001MW A

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	24.2	103.5 mUS
UNKNOWN	2	50.8	54.0 mUS
UNKNOWN	3	71.3	404.4 mUS
TOLUENE	4	103.5	11.2 mUS

BG-001MW B

PHOTOVAC



STOP # 450.0

SAMPLE LIBRARY 1 AUG 10 1994 14:39

ANALYSIS # 25 MARK ESCOBAR

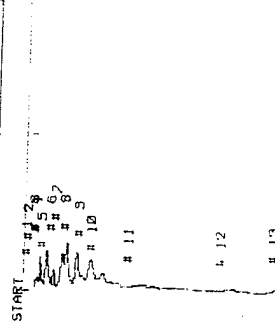
INTERNAL TEMP 30 HAYWARD ANG

GAIN 2 BG-001MW B

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	24.7	605.2 mUS
UNKNOWN	2	50.8	63.4 mUS
UNKNOWN	3	71.6	484.3 mUS
UNKNOWN	4	96.9	11.5 mUS
TOLUENE	5	103.6	364.0 mUS
UNKNOWN	6	132.1	10.8 mUS

04-002MW A

PHOTOVAC



STOP # 450.0

SAMPLE LIBRARY 1 AUG 10 1994 18:10

ANALYSIS # 26 MARK ESCOBAR

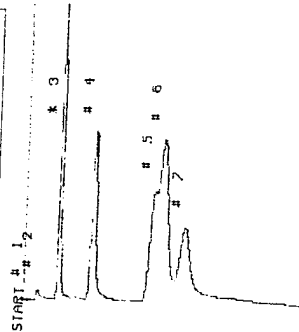
INTERNAL TEMP 31 HAYWARD ANG

GAIN 2 04-002MW A

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	24.2	125.6 mUS
UNKNOWN	2	28.1	271.2 mUS
UNKNOWN	3	32.9	201.3 mUS
UNKNOWN	4	33.5	321.1 mUS
UNKNOWN	5	41.4	134.5 mUS
UNKNOWN	6	62.5	234.9 mUS
UNKNOWN	7	69.4	624.6 mUS
UNKNOWN	8	89.6	196.3 mUS
UNKNOWN	9	106.5	145.9 mUS
UNKNOWN	10	126.1	132.6 mUS
UNKNOWN	11	131.9	12.7 mUS
UNKNOWN	12	136.3	61.2 mUS

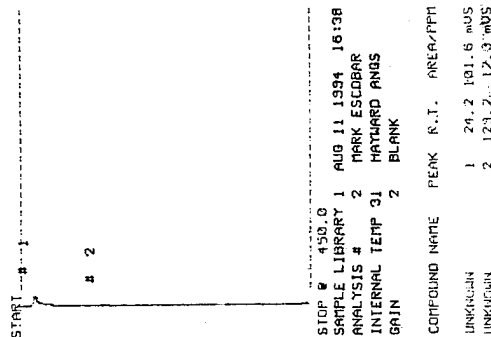
1 PPM STD

PHOTOVAC



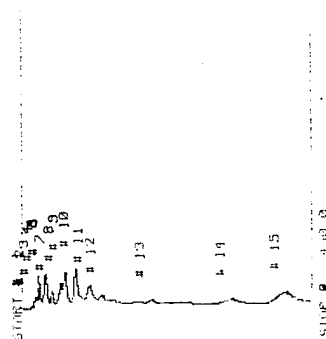
BLANK

PHOTOVAC



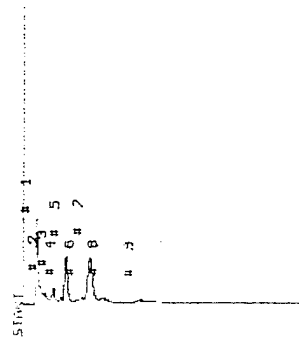
04-002MW-B

PHOTOVAC



05-003MW-A

PHOTOVAC



05-002MW-A

PHOTOVAC

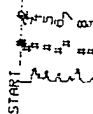


STOP # 438.0
SAMPLE LIBRARY 1 AUG 11 1994 17:25
ANALYSIS # 6 MARK ESCOBAR
INTERNAL TEMP 32 HAYWARD ANG
GAIN 2 05-002MW A

COMPOUND NAME	PEAK	R.T.	05-002MW A
UNIDENTIFIED	1	22.5	50.0 100%
UNIDENTIFIED	2	29.0	130.0 100%
UNIDENTIFIED	3	45.4	12.1 100%
UNIDENTIFIED	4	61.1	25.0 100%
UNIDENTIFIED	5	68.1	10.0 100%
UNIDENTIFIED	6	75.1	10.0 100%
UNIDENTIFIED	7	82.1	10.0 100%
UNIDENTIFIED	8	89.1	10.0 100%
UNIDENTIFIED	9	96.1	10.0 100%
UNIDENTIFIED	10	103.1	10.0 100%
UNIDENTIFIED	11	110.1	10.0 100%
UNIDENTIFIED	12	117.1	10.0 100%
UNIDENTIFIED	13	124.1	10.0 100%
UNIDENTIFIED	14	131.1	10.0 100%
UNIDENTIFIED	15	138.1	10.0 100%
UNIDENTIFIED	16	145.1	10.0 100%

05-002MW-A

PHOTOVAC

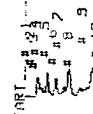


STOP # 438.0
SAMPLE LIBRARY 1 AUG 11 1994 17:37
ANALYSIS # 1 MARK ESCOBAR
INTERNAL TEMP 28 HAYWARD ANG
GAIN 2 05-002MW A

COMPOUND NAME	PEAK	R.T.	05-002MW A
UNIDENTIFIED	1	22.5	50.0 100%
UNIDENTIFIED	2	29.0	130.0 100%
UNIDENTIFIED	3	45.4	12.1 100%
UNIDENTIFIED	4	61.1	25.0 100%
UNIDENTIFIED	5	68.1	10.0 100%
UNIDENTIFIED	6	75.1	10.0 100%
UNIDENTIFIED	7	82.1	10.0 100%
UNIDENTIFIED	8	89.1	10.0 100%
UNIDENTIFIED	9	96.1	10.0 100%
UNIDENTIFIED	10	103.1	10.0 100%
UNIDENTIFIED	11	110.1	10.0 100%
UNIDENTIFIED	12	117.1	10.0 100%
UNIDENTIFIED	13	124.1	10.0 100%
UNIDENTIFIED	14	131.1	10.0 100%
UNIDENTIFIED	15	138.1	10.0 100%
UNIDENTIFIED	16	145.1	10.0 100%

05-002MW-B

PHOTOVAC

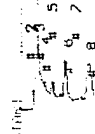


STOP # 438.0
SAMPLE LIBRARY 1 AUG 11 1994 19:17
ANALYSIS # 2 MARK ESCOBAR
INTERNAL TEMP 31 HAYWARD ANG
GAIN 2 05-002MW B

COMPOUND NAME	PEAK	R.T.	05-002MW B
UNIDENTIFIED	1	22.5	50.0 100%
UNIDENTIFIED	2	29.0	130.0 100%
UNIDENTIFIED	3	45.4	12.1 100%
UNIDENTIFIED	4	61.1	25.0 100%
UNIDENTIFIED	5	68.1	10.0 100%
UNIDENTIFIED	6	75.1	10.0 100%
UNIDENTIFIED	7	82.1	10.0 100%
UNIDENTIFIED	8	89.1	10.0 100%
UNIDENTIFIED	9	96.1	10.0 100%
UNIDENTIFIED	10	103.1	10.0 100%
UNIDENTIFIED	11	110.1	10.0 100%
UNIDENTIFIED	12	117.1	10.0 100%
UNIDENTIFIED	13	124.1	10.0 100%
UNIDENTIFIED	14	131.1	10.0 100%
UNIDENTIFIED	15	138.1	10.0 100%
UNIDENTIFIED	16	145.1	10.0 100%

05-003MW-B

PHOTOVAC



STOP # 438.0
SAMPLE LIBRARY 1 AUG 11 1994 17:19
ANALYSIS # 5 MARK ESCOBAR
INTERNAL TEMP 32 HAYWARD ANG
GAIN 2 05-003MW B

COMPOUND NAME	PEAK	R.T.	05-003MW B
UNIDENTIFIED	1	22.5	50.0 100%
UNIDENTIFIED	2	29.0	130.0 100%
UNIDENTIFIED	3	45.4	12.1 100%
UNIDENTIFIED	4	61.1	25.0 100%
UNIDENTIFIED	5	68.1	10.0 100%
UNIDENTIFIED	6	75.1	10.0 100%
UNIDENTIFIED	7	82.1	10.0 100%
UNIDENTIFIED	8	89.1	10.0 100%
UNIDENTIFIED	9	96.1	10.0 100%
UNIDENTIFIED	10	103.1	10.0 100%
UNIDENTIFIED	11	110.1	10.0 100%
UNIDENTIFIED	12	117.1	10.0 100%
UNIDENTIFIED	13	124.1	10.0 100%
UNIDENTIFIED	14	131.1	10.0 100%
UNIDENTIFIED	15	138.1	10.0 100%
UNIDENTIFIED	16	145.1	10.0 100%

05-001MW-A

PHOTOVAC

STOP # 1

2

SAMPLE LIBRARY 1 AUG 10 1994 10:22
ANALYSIS # 20 MARK ESCOBAR
INTERNAL TEMP 30 HAYWARD ANG
GAIN 2 05-001MW A

COMPOUND NAME PEAK R.T. AREA/PPH

UNKNOWN 1 24.9 116.8 μS
UNKNOWN 2 141.3 15.2 μS

05-001MW-B

PHOTOVAC

STOP # 1

2
3
4

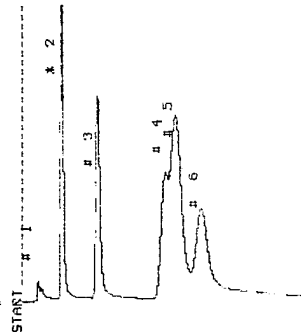
SAMPLE LIBRARY 1 AUG 10 1994 10:43
ANALYSIS # 22 MARK ESCOBAR
INTERNAL TEMP 30 HAYWARD ANG
GAIN 2 05-001MW B

COMPOUND NAME PEAK R.T. AREA/PPH

UNKNOWN 1 24.0 853.2 μS
UNKNOWN 2 22.2 49.8 μS
TOLUENE 3 116.2 3.543 PPH
UNKNOWN 4 123.9 11.5 μS

1 PPM STD

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 5 1994 9:1
 ANALYSIS # 1 MARK ESCOBAR
 INTERNAL TEMP 22 HAYWARD ANGUS
 GAIN 2 1 PPM STD

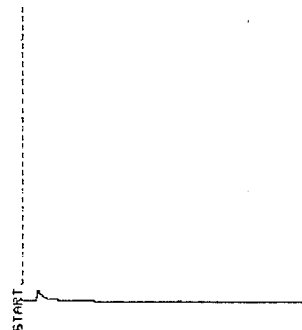
COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	27.1	41.1 mUS
UNKNOWN	2	64.8	5.5 US
UNKNOWN	3	124.8	5.0 US
UNKNOWN	4	233.4	4.9 US
UNKNOWN	5	243.3	11.6 US
UNKNOWN	6	250.7	6.9 US

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
BENZENE	1	64.8	1.000 PPM	
TOLUENE	2	124.8	1.000 PPM	
ETHYLBENZENE	3	233.4	1.000 PPM	
MP XYLENE	4	243.3	1.000 PPM	
O XYLENE	5	250.7	1.000 PPM	

BLANK

PHOTOVAC

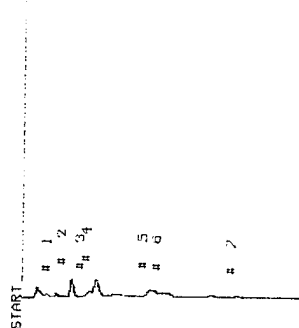


STOP # 450.0
 SAMPLE LIBRARY 1 AUG 5 1994 9:11
 ANALYSIS # 2 MARK ESCOBAR
 INTERNAL TEMP 27 HAYWARD ANGUS
 GAIN 2 BLANK

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	27.1	41.1 mUS

05-002MW 5.5 FT

PHOTOVAC

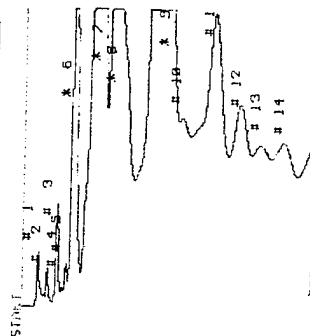


STOP # 450.0
 SAMPLE LIBRARY 1 AUG 5 1994 9:52
 ANALYSIS # 3 MARK ESCOBAR
 INTERNAL TEMP 28 HAYWARD ANGUS
 GAIN 2 05-002MW 5.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	52.3	11.5 mUS
UNKNOWN	2	81.7	214.4 mUS
UNKNOWN	3	111.7	20.6 mUS
TOLUENE	4	121.2	56.80 PPM
UNKNOWN	5	203.4	206.8 mUS
ETHYLBENZENE	6	231.6	3.056 PPM
UNKNOWN	7	342.5	12.8 mUS

05-002MW 10.5 FT

PHOTOVAC

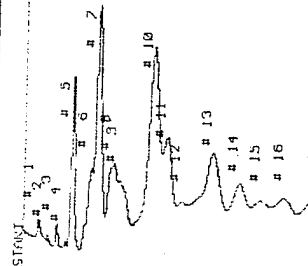


STOP # 450.0
 SAMPLE LIBRARY 1 AUG 5 1994 10:1
 ANALYSIS # 4 MARK ESCOBAR
 INTERNAL TEMP 28 HAYWARD ANGUS
 GAIN 2 05-002MW 10.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	26.7	232.3 mUS
UNKNOWN	2	42.5	253.2 mUS
UNKNOWN	3	52.3	1.3 US
BENZENE	4	65.2	23.13 PPM
UNKNOWN	5	81.3	16.7 US
TOLUENE	6	113.5	9.285 PPM
UNKNOWN	7	145.9	52.1 US
ETHYLBENZENE	8	216.9	35.29 PPM
MP XYLENE	9	254.2	865.4 PPM
O XYLENE	10	305.9	5.553 PPM
UNKNOWN	11	342.5	10.3 US
UNKNOWN	12	379.2	14.6 US
UNKNOWN	13	415.7	18.8 US

05-002MW 10.5 FT

PHOTOVAC



STOP # 430.0
SAMPLE LIBRARY 1 AUG 5 1994 10:11
ANALYSIS # 5 MARK ESCOBAR
INTERNAL TEMP 23 HAYWARD ANG
GAIN 2 5-20u 10.5 20uL

COMPOUND NAME	PEAK	R.T.	AREA/PPT
UNKNOWN	1	26.7	26.4 mUS
UNKNOWN	2	42.1	28.3 mUS
UNKNOWN	3	56.9	243.1 mUS
BENZENE	4	80.8	5.431 PPB
UNKNOWN	5	111.1	3.2 US
TOLUENE	6	120.8	1.602 PPB
UNKNOWN	7	146.8	4.6 US
UNKNOWN	8	156.0	3.4 US
UNKNOWN	9	208.2	13.6 US
ETHTL BENZENE	10	223.8	1.222 PPB
DI-XYLENE	11	234.2	222.8 PPB
UNKNOWN	12	302.7	1.262 PPB
UNKNOWN	13	304.8	6.4 US
UNKNOWN	14	322.2	9.7 US
UNKNOWN	15	413.5	6.3 US
UNKNOWN	16	430.0	

05-002MW 15.5 FT

PHOTOVAC

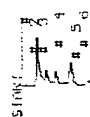


STOP # 430.0
SAMPLE LIBRARY 1 AUG 5 1994 10:42
ANALYSIS # 6 MARK ESCOBAR
INTERNAL TEMP 23 HAYWARD ANG
GAIN 2 05-002uL 15.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPT
UNKNOWN	1	26.6	435.6 mUS
UNKNOWN	2	42.1	28.1 mUS
UNKNOWN	3	56.9	212.7 mUS
UNKNOWN	4	80.8	1.72 US
UNKNOWN	5	107.8	341.7 mUS
TOLUENE	6	119.6	283.1 PPB
UNKNOWN	7	148.0	274.1 mUS
UNKNOWN	8	184.2	61.8 mUS
UNKNOWN	9	207.0	186.8 mUS
ETHTL BENZENE	10	229.2	11.91 PPB
D-XYLENE	11	301.9	27.32 PPB
UNKNOWN	12	343.9	118.5 mUS

05-002MW 20.5 FT

PHOTOVAC

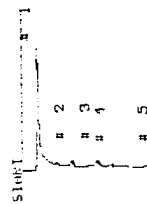


STOP # 430.0
SAMPLE LIBRARY 1 AUG 5 1994 10:30
ANALYSIS # 7 MARK ESCOBAR
INTERNAL TEMP 23 HAYWARD ANG
GAIN 2 05-002uL 20.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPT
UNKNOWN	1	26.7	265.9 mUS
UNKNOWN	2	42.1	32.0 mUS
UNKNOWN	3	56.9	120.4 mUS
UNKNOWN	4	80.8	355.4 mUS
UNKNOWN	5	107.8	271.2 mUS
TOLUENE	6	119.6	85.83 PPB
UNKNOWN	7	148.0	191.2 mUS

05-002MW 25.5 FT

PHOTOVAC

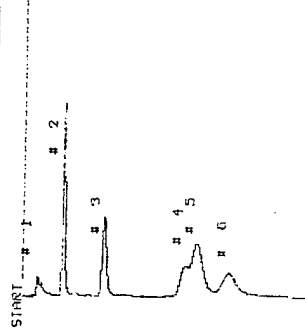


STOP # 430.0
SAMPLE LIBRARY 1 AUG 5 1994 10:30
ANALYSIS # 8 MARK ESCOBAR
INTERNAL TEMP 30 HAYWARD ANG
GAIN 2 05-002uL 25.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPT
UNKNOWN	1	26.5	1.0 US
UNKNOWN	2	42.1	61.6 mUS
TOLUENE	3	118.6	12.28 PPB
UNKNOWN	4	138.8	15.0 mUS
UNKNOWN	5	205.8	30.5 mUS

1 PPM STD

PHOTOVAC



STOP # 450.0
SAMPLE LIBRARY 1 AUG 5 1994 16:44
ANALYSIS # 1 MARK ESCOBAR
INTERNAL TEMP 33 HAYWARD ANG
GAIN 2 1 PPM STD

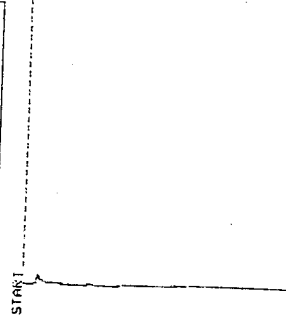
COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.7	26.9 MMS
UNKNOWN	2	66.5	2.5 US
UNKNOWN	3	132.0	1.4 US
UNKNOWN	4	200.5	1.4 US
UNKNOWN	5	278.7	1.5 US
UNKNOWN	6	323.5	1.5 US

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
	BENZENE	1	66.5	1.000 PPM
	TOLUENE	2	132.0	1.000 PPM
	ETHYL BENZENE	3	200.5	1.000 PPM
	MP XYLENE	4	278.2	1.000 PPM
	O XYLENE	5	323.5	1.000 PPM

BLANK

PHOTOVAC

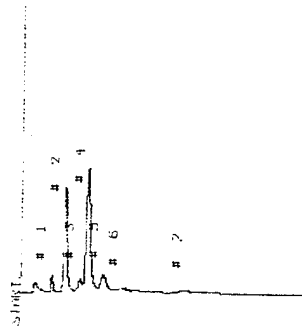


STOP # 450.0
SAMPLE LIBRARY 1 AUG 5 1994 16:54
ANALYSIS # 2 MARK ESCOBAR
INTERNAL TEMP 34 HAYWARD ANG
GAIN 2 BLANK

COMPOUND NAME PEAK R.T. AREA/PPM

05-005RBH 1 FT

PHOTOVAC

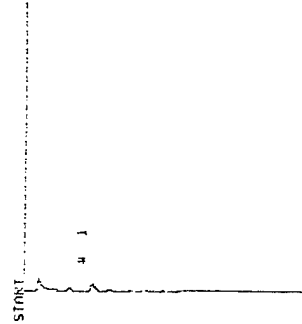


STOP # 450.0
SAMPLE LIBRARY 1 AUG 5 1994 17:2
ANALYSIS # 3 MARK ESCOBAR
INTERNAL TEMP 34 HAYWARD ANG
GAIN 2 05-005BH RE 1FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	52.1	164.4 MMS
BENZENE	2	72.7	672.8 PPM
UNKNOWN	3	92.6	202.2 MMS
UNKNOWN	4	103.9	2.9 US
UNKNOWN	5	174.9	136.3 PPM
UNKNOWN	6	186.2	31.6 MMS
UNKNOWN	7	200.7	18.70 PPM

05-005RBH 6.5 FT

PHOTOVAC



STOP # 450.0
SAMPLE LIBRARY 1 AUG 5 1994 17:37
ANALYSIS # 4 MARK ESCOBAR
INTERNAL TEMP 34 HAYWARD ANG
GAIN 2 05-005BH RE 6.5F

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	112.9	118.2 MMS

05-005RBH 15.5 FT

PHOTOVAC

START

2

STOP # 450.0
SAMPLE LIBRARY 1 AUG 5 1994 17:45
ANALYSIS # 5 PARK ESCOBAR
INTERNAL TEMP 34 HAYWARD ANG
GAIN 2 05-005BH RE 15.5

COMPOUND NAME PEAK R.T. AREA/PTH
UNKNOWN 1 25.2 430.8 mUS
UNKNOWN 2 112.9 88.2 mUS

05-005RBH 20 FT

PHOTOVAC

START

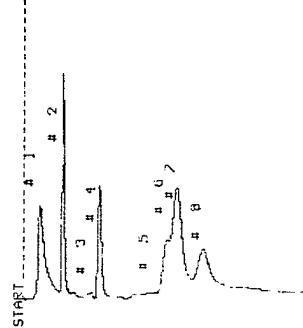
2
3

STOP # 450.0
SAMPLE LIBRARY 1 AUG 5 1994 17:54
ANALYSIS # 6 MARK ESCOBAR
INTERNAL TEMP 34 HAYWARD ANG
GAIN 2 05-005BH RE 20FT

COMPOUND NAME PEAK R.T. AREA/PTH
UNKNOWN 1 25.2 430.8 mUS
UNKNOWN 2 74.9 59.3 mUS
UNKNOWN 3 112.9 268.8 mUS

100 PPB STD

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 4 1994 9:08
 ANALYSIS # 1 MARK ESCOBAR
 INTERNAL TEMP 27 HAYWARD ANGUS
 GAIN 10 100 PPB STD

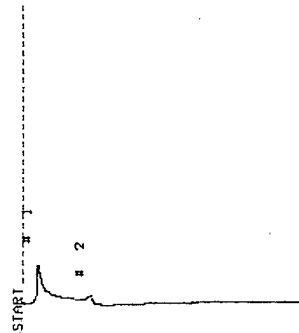
COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	28.2	287.0
UNKNOWN	2	65.1	2.7
UNKNOWN	3	111.7	63.4
UNKNOWN	4	124.4	2.3
UNKNOWN	5	210.0	133.6
UNKNOWN	6	233.4	1.8
UNKNOWN	7	243.3	6.1
UNKNOWN	8	251.5	3.1

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
BENZENE	1	65.1	100.0	PPB
TOLUENE	2	124.4	100.0	PPB
ETHYLBENZENE	3	233.4	100.0	PPB
MP XYLENE	4	243.3	100.0	PPB
D XYLENE	5	251.5	100.0	PPB

BLANK

PHOTOVAC

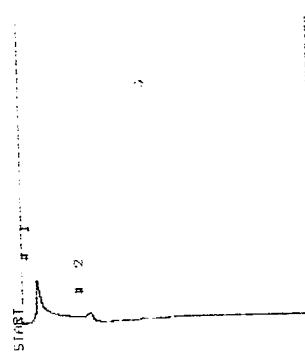


STOP # 450.0
 SAMPLE LIBRARY 1 AUG 4 1994 9:18
 ANALYSIS # 2 MARK ESCOBAR
 INTERNAL TEMP 27 HAYWARD ANGUS
 GAIN 10 BLANK

COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	26.8	34.2
UNKNOWN	2	111.7	134.1

05-001MW 5.5 FT

PHOTOVAC

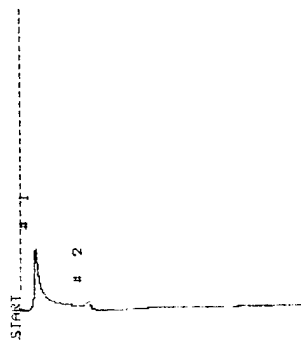


STOP # 450.0
 SAMPLE LIBRARY 1 AUG 4 1994 9:26
 ANALYSIS # 3 MARK ESCOBAR
 INTERNAL TEMP 27 HAYWARD ANGUS
 GAIN 10 ~~100 PPB STD~~

COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	26.2	242.3
UNKNOWN	2	111.7	133.2

05-001MW 10.5 FT

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 4 1994 10:5
 ANALYSIS # 4 MARK ESCOBAR
 INTERNAL TEMP 27 HAYWARD ANGUS
 GAIN 10 05-001MW 10.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	26.3	419.9
UNKNOWN	2	111.7	129.6

05-001MW 15.5 FT

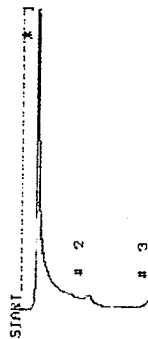
PHOTOVAC



STOP # 430.0
 SAMPLE LIBRARY 1 AUG 4 1994 10:13
 ANALYSIS # 5 MARK ESCOBAR
 INTERNAL TEMP 22 HAYWARD ANGUS
 GRAIN 10 05-001MW 15.5FT
 COMPOUND NAME PEAK R.T. AREA/PPT
 UNKNOWN 1 26.5 3.4 US
 UNKNOWN 2 111.7 120.3 mUS

05-001MW 20.5 FT

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 4 1994 10:22
 ANALYSIS # 6 MARK ESCOBAR
 INTERNAL TEMP 22 HAYWARD ANGUS
 GRAIN 10 05-001MW 20.5FT
 COMPOUND NAME PEAK R.T. AREA/PPT
 UNKNOWN 1 26.5 4.3 US
 UNKNOWN 2 111.7 118.6 mUS
 UNKNOWN 3 208.2 230.3 mUS

05-001MW 25.5 FT

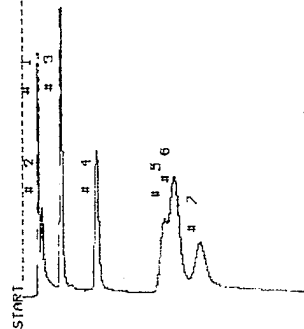
PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 4 1994 10:35
 ANALYSIS # 7 MARK ESCOBAR
 INTERNAL TEMP 28 HAYWARD ANGUS
 GRAIN 10 05-001MW 25.5FT
 COMPOUND NAME PEAK R.T. AREA/PPT
 UNKNOWN 1 26.6 2.5 US
 UNKNOWN 2 111.9 120.7 mUS

1 PPM STD

PHOTOVAC



STOP # 450.0
SAMPLE LIBRARY 1 AUG 4 1994 14:41
ANALYSIS # 8 MARK ESCOBAR
INTERNAL TEMP 28 HAYWARD ANGUS
GAIN 2 1 PPM STD

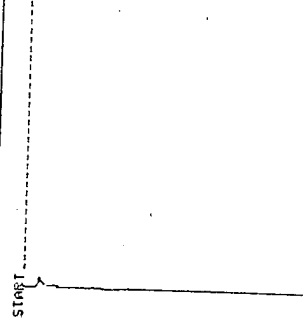
COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	26.6	2.1 US
UNKNOWN	2	32.6	306.6 mUS
UNKNOWN	3	63.2	3.8 US
UNKNOWN	4	121.6	3.1 US
UNKNOWN	5	228.6	2.7 US
UNKNOWN	6	243.6	0.6 US
UNKNOWN	7	264.3	3.6 US

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
	BENZENE	1	63.2	1.000 PPM
	TOLUENE	2	121.6	1.000 PPM
	ETHYLBENZENE	3	228.6	1.000 PPM
	MP XYLENE	4	243.6	1.000 PPM
	P XYLENE	5	264.3	1.000 PPM

BLANK

PHOTOVAC

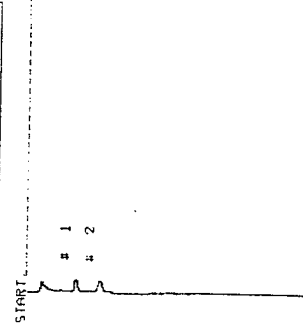


STOP # 450.0
SAMPLE LIBRARY 1 AUG 4 1994 14:51
ANALYSIS # 9 MARK ESCOBAR
INTERNAL TEMP 23 HAYWARD ANGUS
GAIN 2 BLANK

COMPOUND NAME PEAK R.T. AREA/PPM

05-003MW 5.5 FT

PHOTOVAC

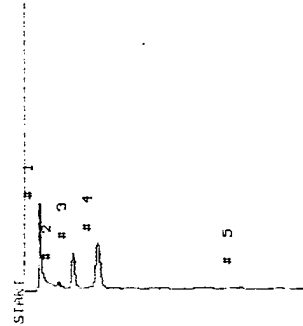


STOP # 450.0
SAMPLE LIBRARY 1 AUG 4 1994 14:59
ANALYSIS # 18 MARK ESCOBAR
INTERNAL TEMP 29 HAYWARD ANGUS
GAIN 2 05-003MW 5.5FT

COMPOUND NAME PEAK R.T. AREA/PPM
UNKNOWN 1 26.6 306.6 mUS
TOLUENE 2 121.6 28.86 PPM

05-003MW 10.5 FT

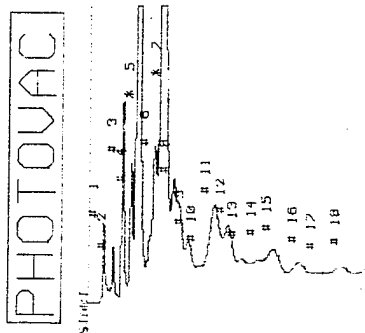
PHOTOVAC



STOP # 450.0
SAMPLE LIBRARY 1 AUG 4 1994 15:7
ANALYSIS # 11 MARK ESCOBAR
INTERNAL TEMP 29 HAYWARD ANGUS
GAIN 2 05-003MW 10.5FT

COMPOUND NAME PEAK R.T. AREA/PPM
UNKNOWN 1 26.6 306.6 mUS
UNKNOWN 2 32.6 24.6 mUS
UNKNOWN 3 29.3 586.9 mUS
TOLUENE 4 118.3 350.4 PPM
UNKNOWN 5 337.6 25.3 mUS

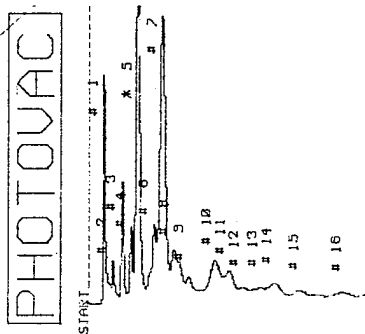
05-003MW 15.5 FT



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 4 1994 15:16
 ANALYSIS # 12 MARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANG
 GAIN 2 95-003MW 15.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	26.4	436.2 mUS
UNKNOWN	2	41.2	429.0 mUS
UNKNOWN	3	56.3	2.4 US
BENZENE	4	20.1	434.1 PPB
UNKNOWN	5	23.4	35.8 US
UNKNOWN	6	106.6	3.8 US
TOLUENE	7	116.2	2.850 PPB
UNKNOWN	8	132.6	5.1 US
UNKNOWN	9	161.2	1.2 US
UNKNOWN	11	202.8	3.2 US
ETHYLBENZENE	12	225.0	549.5 PPB
MP XYLENE	13	246.5	5.149 PPB
O XYLENE	14	225.2	11.31 PPB
O XYLENE	15	202.1	104.1 PPB
UNKNOWN	16	300.5	524.2 mUS
UNKNOWN	18	405.8	442.4 mUS

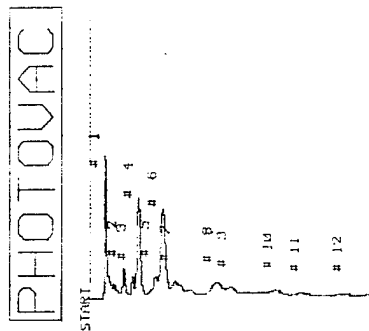
05-003MW 15.5 FT



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 4 1994 15:25
 ANALYSIS # 13 MARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANG
 GAIN 2 5-31W 15.5 50UL

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	26.3	1.8 US
UNKNOWN	2	41.5	240.8 mUS
UNKNOWN	3	56.3	1.4 US
BENZENE	4	20.1	235.9 PPB
UNKNOWN	5	23.4	2.2 US
UNKNOWN	6	106.3	1.6 US
TOLUENE	7	118.4	2.602 PPB
UNKNOWN	8	136.4	1.2 US
UNKNOWN	9	162.2	313.5 mUS
UNKNOWN	10	204.6	1.6 US
ETHYLBENZENE	11	226.2	266.9 PPB
MP XYLENE	12	248.6	2.222 PPB
O XYLENE	13	226.6	6.246 PPB
O XYLENE	14	238.7	34.41 PPB
UNKNOWN	15	340.3	262.5 mUS
UNKNOWN	16	408.0	205.2 mUS

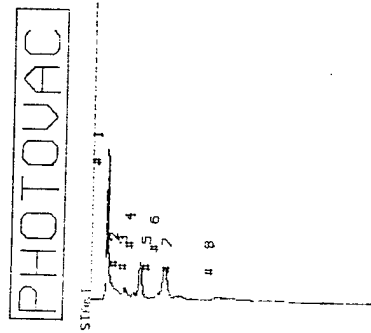
05-003MW 20.5 FT



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 4 1994 15:35
 ANALYSIS # 14 MARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANG
 GAIN 2 95-003MW 20.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	26.4	1.1 US
UNKNOWN	2	56.3	286.1 mUS
BENZENE	3	60.9	52.52 PPB
UNKNOWN	4	23.1	1.2 US
UNKNOWN	5	106.6	944.9 mUS
TOLUENE	6	110.5	221.2 PPB
UNKNOWN	7	136.0	240.3 mUS
UNKNOWN	8	204.0	600.9 mUS
ETHYLBENZENE	9	226.2	82.56 PPB
O XYLENE	10	242.9	31.82 PPB
UNKNOWN	11	340.3	85.3 mUS
UNKNOWN	12	408.0	43.5 mUS

05-003MW 25.5 FT

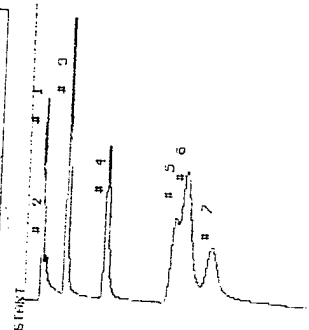


STOP # 450.0
 SAMPLE LIBRARY 1 AUG 4 1994 15:44
 ANALYSIS # 15 MARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANG
 GAIN 2 95-003MW 25.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	26.4	1.1 US
UNKNOWN	2	56.3	64.6 mUS
BENZENE	3	20.1	5.442 PPB
UNKNOWN	4	23.3	586.8 mUS
UNKNOWN	5	106.9	31.6 mUS
TOLUENE	6	118.3	264.7 PPB
UNKNOWN	7	136.4	12.6 mUS
UNKNOWN	8	204.6	96.6 mUS

1 PPM STD

PHOTOVAC



STOP # 450.0
SAMPLE LIBRARY 1 AUG 6 1994 9:26
ANALYSIS # 2 MARK ESCOBAR
INTERNAL TEMP 27 HATUARD ANG
GAIN 2 1 PPM STD

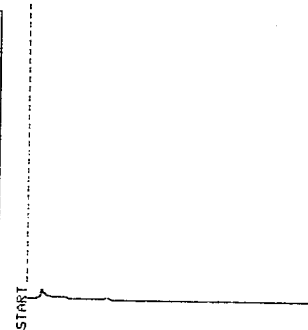
COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	27.1	1.4 US
UNKNOWN	2	33.0	54.1 mUS
UNKNOWN	3	65.9	4.0 US
UNKNOWN	4	130.0	3.5 US
UNKNOWN	5	240.1	3.4 US
UNKNOWN	6	257.0	8.0 US
UNKNOWN	7	300.3	4.0 US

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
BENZENE	1	65.9	1.000 PPM	
TOLUENE	2	130.0	1.000 PPM	
ETHYL-BENZENE	3	240.1	1.000 PPM	
MP XYLENE	4	257.0	1.000 PPM	
O XYLENE	5	300.3	1.000 PPM	

BLANK

PHOTOVAC

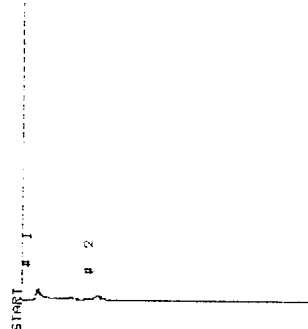


STOP # 450.0
SAMPLE LIBRARY 1 AUG 6 1994 9:36
ANALYSIS # 3 MARK ESCOBAR
INTERNAL TEMP 28 HATUARD ANG
GAIN 2 BLANK

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	27.1	1.4 US

05-001RBH 1.5 FT

PHOTOVAC

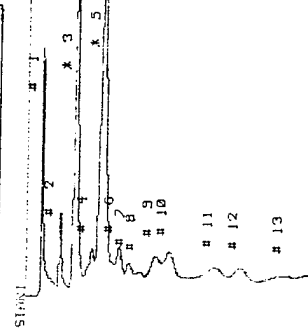


STOP # 450.0
SAMPLE LIBRARY 1 AUG 6 1994 10:12
ANALYSIS # 4 MARK ESCOBAR
INTERNAL TEMP 30 HATUARD ANG
GAIN 2 05-001RBH 1.5 FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.8	14.6 mUS
TOLUENE	2	124.4	17.26 PPM

05-001RBH 15.5 FT

PHOTOVAC

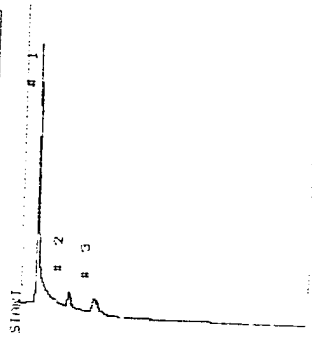


STOP # 450.0
SAMPLE LIBRARY 1 AUG 6 1994 10:20
ANALYSIS # 5 MARK ESCOBAR
INTERNAL TEMP 30 HATUARD ANG
GAIN 2 05-001RBH 15.5 FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	26.4	1.9 US
UNKNOWN	2	36.1	833.4 mUS
UNKNOWN	3	73.1	8.1 US
UNKNOWN	4	106.6	1.2 US
TOLUENE	5	121.8	3.820 PPM
UNKNOWN	6	130.0	1.3 US
UNKNOWN	7	166.2	985.5 mUS
UNKNOWN	8	183.2	536.5 mUS
UNKNOWN	9	204.8	1.3 US
ETHYL-BENZENE	10	230.4	518.3 PPM
O XYLENE	11	302.2	156.8 PPM
UNKNOWN	12	343.9	613.1 mUS
UNKNOWN	13	412.4	336.8 mUS

05-001RBH 5.5 FT

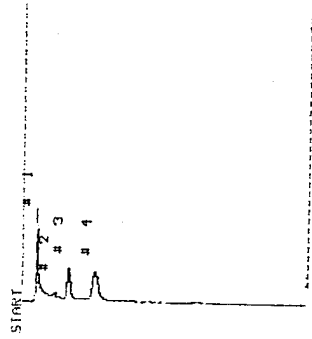
PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 6 1994 10:30
 ANALYSIS # 6 MARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANG
 GAIN 2 05-001RBH 5.5 FT
 COMPOUND NAME PEAK R.T. AREA/PPH
 UNKNOWN 1 26.1 2.1 US
 UNKNOWN 2 28.1 219.6 mUS
 TOLUENE 3 120.4 112.1 PFB

05-001RBH 10.5 FT

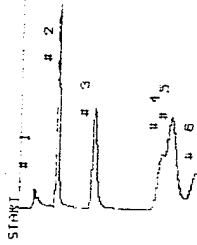
PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 6 1994 10:33
 ANALYSIS # 7 MARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANG
 GAIN 2 05-001RBH 10.5 FT
 COMPOUND NAME PEAK R.T. AREA/PPH
 UNKNOWN 1 25.9 644.2 mUS
 UNKNOWN 2 55.1 20.9 mUS
 UNKNOWN 3 72.7 450.2 mUS
 TOLUENE 4 119.6 243.9 PFB

1 PPM STD

PHOTOVAC



STOP @ 450.0
 SAMPLE LIBRARY 1 AUG 6 1994 10:43
 ANALYSIS # 8 MARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANG
 GRAIN 2 1 PPM STD

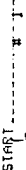
COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	26.1	29.2 MUS
BENZENE	2	61.2	651.8 PPM
TOLUENE	3	121.6	222.9 PPM
ETHYLBENZENE	4	226.2	532.9 PPM
ETHYLBENZENE	5	246.3	1.524 PPM
O XYLENE	6	281.1	607.9 PPM

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
	BENZENE	1	61.2	1.000 PPM
	TOLUENE	2	121.6	1.000 PPM
	ETHYLBENZENE	3	226.2	1.000 PPM
	ETHYLBENZENE	4	246.3	1.000 PPM
	O XYLENE	5	281.1	1.000 PPM

BLANK

PHOTOVAC

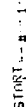


STOP @ 450.0
 SAMPLE LIBRARY 1 AUG 6 1994 11:3
 ANALYSIS # 9 MARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANG
 GRAIN 2 BLANK

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.8	645.1 MUS

05-002RBH 1 FT

PHOTOVAC

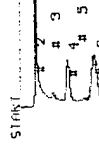


STOP @ 450.0
 SAMPLE LIBRARY 1 AUG 6 1994 11:36
 ANALYSIS # 10 MARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANG
 GRAIN 2 05-002RBH 1FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	26.1	10.2 MUS

05-002RBH 5.5 FT

PHOTOVAC



STOP @ 450.0
 SAMPLE LIBRARY 1 AUG 6 1994 11:45
 ANALYSIS # 11 MARK ESCOBAR
 INTERNAL TEMP 32 HAYWARD ANG
 GRAIN 2 05-002RBH 5.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.7	1.4 US
UNKNOWN	2	54.3	41.5 MUS
UNKNOWN	3	76.2	631.1 MUS
UNKNOWN	4	103.3	10.2 MUS
TOLUENE	5	118.0	532.9 PPM
UNKNOWN	6	146.4	96.2 MUS

05-002RBH 14.5 FT

PHOTOVAC

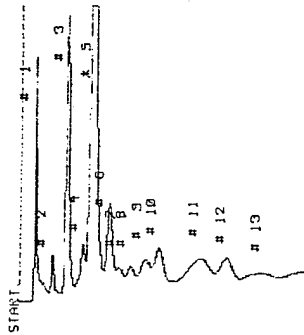


STOP # 430.0
SAMPLE LIBRARY 1 AUG 6 1994 11:58
ANALYSIS # 12 MARK ESCOBAR
INTERNAL TEMP 32 HAYWARD ANGUS
GAIN 2 05-002RBH 14.5 FT

COMPONENT NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.5	1.3 US
UNKNOWN	2	54.1	240.3 mUS
UNKNOWN	3	26.3	2.3 US
UNKNOWN	4	105.0	24.3 mUS
TOLUENE	5	117.4	1.205 PPM
UNKNOWN	6	145.6	136.6 mUS
UNKNOWN	7	303.1	22.0 mUS

05-002RBH 10.5 FT

PHOTOVAC

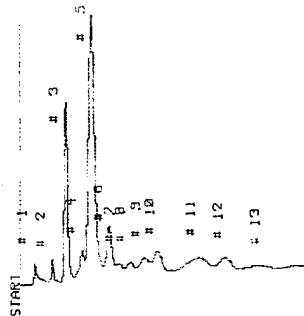


STOP # 430.0
SAMPLE LIBRARY 1 AUG 6 1994 12:7
ANALYSIS # 13 MARK ESCOBAR
INTERNAL TEMP 32 HAYWARD ANGUS
GAIN 2 05-002RBH 10.5 FT

COMPONENT NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.5	1.9 US
UNKNOWN	2	54.1	425.5 mUS
UNKNOWN	3	26.5	5.3 US
UNKNOWN	4	102.2	993.2 mUS
TOLUENE	5	117.4	2.721 PPM
UNKNOWN	6	145.6	2.6 US
UNKNOWN	7	160.2	556.4 mUS
UNKNOWN	8	170.2	230.3 mUS
UNKNOWN	9	201.6	1.4 US
ETHYL BENZENE	10	223.2	834.3 PPM
O XYLENE	11	230.2	560.3 PPM
UNKNOWN	12	303.1	1.4 US
UNKNOWN	13	306.2	520.3 mUS

05-002RBH 10.5 FT

PHOTOVAC

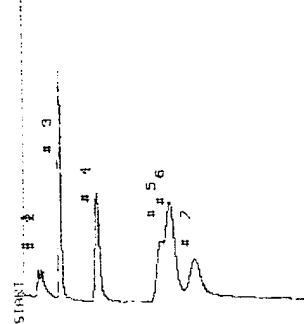


STOP # 430.0
SAMPLE LIBRARY 1 AUG 6 1994 12:35
ANALYSIS # 14 MARK ESCOBAR
INTERNAL TEMP 32 HAYWARD ANGUS
GAIN 2 05-002RBH 10.5 FT 10.5 FT

COMPONENT NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.7	30.0 mUS
UNKNOWN	2	54.1	232.0 mUS
UNKNOWN	3	26.1	3.2 US
UNKNOWN	4	102.3	625.5 mUS
TOLUENE	5	117.4	3.522 PPM
UNKNOWN	6	145.2	1.6 mUS
UNKNOWN	7	160.2	441.7 mUS
UNKNOWN	8	170.2	536.3 mUS
UNKNOWN	9	201.0	1.6 US
ETHYL BENZENE	10	222.6	543.0 PPM
O XYLENE	11	231.1	354.3 PPM
UNKNOWN	12	301.3	500.7 mUS
UNKNOWN	13	306.2	263.4 mUS

1 PPM STD

PHOTOVAC



STOP # 430.0
SAMPLE LIBRARY 1 AUG 6 1994 12:45
ANALYSIS # 15 MARK ESCOBAR
INTERNAL TEMP 32 HAYWARD ANGUS
GAIN 2 1 PPM STD

COMPONENT NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.5	57.7 mUS
UNKNOWN	2	26.2	41.6 mUS
BENZENE	3	60.3	1.108 PPM
TOLUENE	4	110.1	1.058 PPM
ETHYL BENZENE	5	222.0	1.041 PPM
O XYLENE	6	235.0	1.032 PPM
O XYLENE	7	225.2	932.2 PPM

1 PPM STD

BLANK

05-003RBH 1 FT

05-003RBH 5.5 FT

PHOTOVAC

CALIBRATED PEAK 3, BENZENE

SAMPLE LIBRARY 1 AUG 6 1994 12:46
ANALYSIS # 15 MARK ESCOBAR
INTERNAL TEMP 32 HAYWARD ANG'S
GAIN 2 1 PPM STD

COMPOUND NAME	PEAK	R.T.	AREA/HTH
UNKNOWN	1	25.5	57.2 mUS
UNKNOWN	2	54.2	41.6 mUS
UNKNOWN	3	60.3	1.000 PPM
UNKNOWN	4	110.3	97.1 PPM
UNKNOWN	5	244.3	133.2 PPM
UNKNOWN	6	255.1	332.0 PPM
UNKNOWN	7	271.2	405.4 PPM

PHOTOVAC

START

STOP # 450.0
SAMPLE LIBRARY 1 AUG 6 1994 12:55
ANALYSIS # 16 MARK ESCOBAR
INTERNAL TEMP 32 HAYWARD ANG'S
GAIN 2 BLANK

COMPOUND NAME	PEAK	R.T.	AREA/HTH
UNKNOWN	1	25.2	492.4 mUS

PHOTOVAC

START

STOP # 450.0
SAMPLE LIBRARY 1 AUG 6 1994 13: 6
ANALYSIS # 17 MARK ESCOBAR
INTERNAL TEMP 33 HAYWARD ANG'S
GAIN 2 05-003RBH 1 FT

COMPOUND NAME	PEAK	R.T.	AREA/HTH
UNKNOWN	1	25.4	65.1 mUS

PHOTOVAC

START



STOP # 450.0
SAMPLE LIBRARY 1 AUG 6 1994 13:23
ANALYSIS # 18 MARK ESCOBAR
INTERNAL TEMP 33 HAYWARD ANG'S
GAIN 2 05-003RBH 5.5 FT

COMPOUND NAME	PEAK	R.T.	AREA/HTH
UNKNOWN	1	25.2	220.3 mUS
UNKNOWN	2	29.4	307.2 mUS
UNKNOWN	3	33.0	303.0 mUS
UNKNOWN	4	54.2	304.1 mUS
UNKNOWN	6	66.3	255.3 PPM
UNKNOWN	7	75.3	3.0 US
UNKNOWN	8	95.1	234.3 mUS
UNKNOWN	9	101.9	636.3 mUS
UNKNOWN	10	110.2	1.202 PPM
UNKNOWN	11	136.0	244.1 mUS
UNKNOWN	12	144.4	1.0 US
UNKNOWN	13	172.2	21.3 mUS
UNKNOWN	14	172.2	419.2 mUS
UNKNOWN	15	224.8	9.360 PPM
UNKNOWN	16	269.1	134.8 PPM
UNKNOWN	17	321.5	23.6 mUS

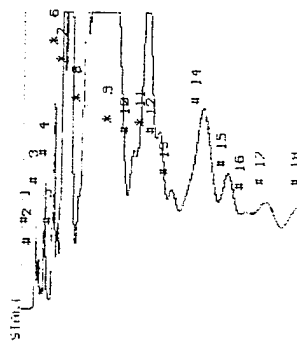
05-003RBH 10.5 FT

05-003RBH 10.5 FT

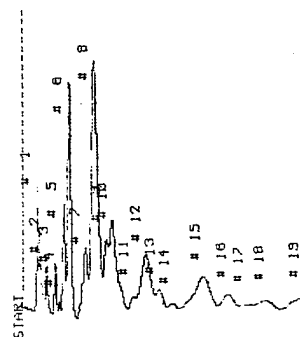
05-003RBH 14.5 FT

1 PPM STD

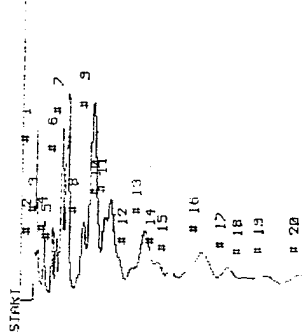
PHOTOVAC



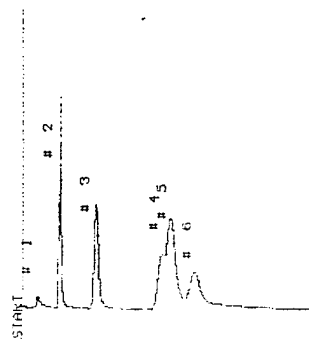
PHOTOVAC



PHOTOVAC



PHOTOVAC



1 PPM STD

BLANK

05-004RBH 6 IN

05-004RBH 5.5 FT

PHOTOVAC

CALIBRATED PEAK 2, BENZENE
 SAMPLE LIBRARY 1 AUG 6 1994 14:13
 ANALYSIS # 22 MARK ESCOBAR
 INTERNAL TEMP 33 HATHARD ANG
 GAIN 2 1 PPM STD

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	20.2	10.1 mUS
BENZENE	2	60.3	1.000 PPM
TOLUENE	3	118.9	950.2 PPM
ETHYL BENZENE	4	222.6	905.2 PPM
PF-XYL	5	230.4	895.0 PPM
O-XYL	6	279.1	803.0 PPM

PHOTOVAC

START # 3

STOP # 450.0
 SAMPLE LIBRARY 1 AUG 6 1994 14:13
 ANALYSIS # 23 MARK ESCOBAR
 INTERNAL TEMP 34 HATHARD ANG
 GAIN 2 BLANK

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.8	2.2 US

PHOTOVAC

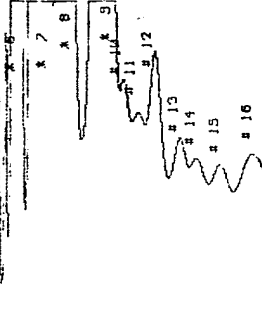
START # 2

STOP # 450.0
 SAMPLE LIBRARY 1 AUG 6 1994 14:33
 ANALYSIS # 24 MARK ESCOBAR
 INTERNAL TEMP 34 HATHARD ANG
 GAIN 2 05-004RBH 6 INCH

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.3	1.7 US
UNKNOWN	2	28.3	60.3 mUS
UNKNOWN	3	53.3	45.5 mUS
BENZENE	4	66.5	37.62 PPM
UNKNOWN	5	74.5	112.3 mUS
UNKNOWN	6	92.0	202.5 mUS
TOLUENE	7	114.2	41.95 PPM
UNKNOWN	8	135.6	112.1 mUS

PHOTOVAC

START # 21

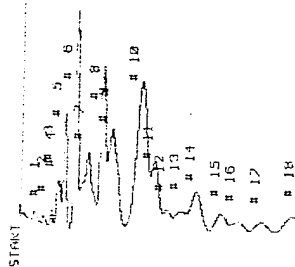


STOP # 450.0
 SAMPLE LIBRARY 1 AUG 6 1994 15:51
 ANALYSIS # 25 MARK ESCOBAR
 INTERNAL TEMP 34 HATHARD ANG
 GAIN 2 5-4RBH 5.5 20UL

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	29.3	220.1 mUS
UNKNOWN	2	31.2	85.3 mUS
UNKNOWN	3	38.9	1.3 US
UNKNOWN	4	42.5	1.9 US
UNKNOWN	5	53.3	3.4 US
UNKNOWN	6	63.1	20.5 US
UNKNOWN	7	105.4	205.6 US
UNKNOWN	8	144.8	33.1 US
UNKNOWN	9	202.4	182.7 US
PF-XYL	10	237.6	2.014 PPM
O-XYL	11	253.8	3.520 PPM
O-XYL	12	266.2	2.084 PPM
UNKNOWN	13	326.8	13.4 US
UNKNOWN	14	422.1	11.4 US
UNKNOWN	15	531.2	13.6 US

05-004RBH 5.5 FT

PHOTOVAC



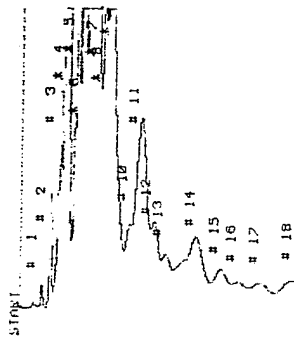
STOP # 4-0.0
SAMPLE LIBRARY 1 AUG 6 1994 16:1
ANALYSIS # 26 MARK ESCOBAR
INTERNAL TEMP 34 HAYWARD ANG
GAIN 2 5-4RBH 5.5 FT

COMP. NAME PEAK R.T. AREA/PPH

UNKNOWN	2	53.1	150.3 mUS
BENZENE	3	62.5	188.0 PPH
UNKNOWN	4	65.2	123.1 PPH
UNKNOWN	5	73.9	1.0 US
UNKNOWN	6	82.2	4.4 US
TOLUENE	7	112.0	1.452 PPH
UNKNOWN	8	134.8	4.8 US
UNKNOWN	9	149.2	4.3 US
UNKNOWN	10	195.7	8.5 US
ETHYL BENZENE	11	212.6	1.211 PPH
UNKNOWN	12	232.6	140.2 PPH
UNKNOWN	13	261.2	229.3 PPH
UNKNOWN	14	285.1	211.3 PPH
UNKNOWN	15	325.1	394.5 mUS
UNKNOWN	16	352.0	402.6 mUS
UNKNOWN	17	380.2	438.2 mUS

05-004RBH 10.5 FT

PHOTOVAC



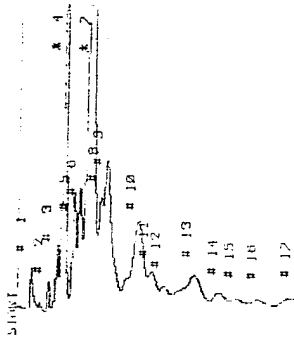
STOP # 450.0
SAMPLE LIBRARY 1 AUG 6 1994 16:18
ANALYSIS # 22 MARK ESCOBAR
INTERNAL TEMP 34 HAYWARD ANG
GAIN 2 5-4RBH 10.5 SUL

COMP. NAME PEAK R.T. AREA/PPH

UNKNOWN	1	38.5	176.1 mUS
UNKNOWN	2	52.9	1.4 US
BENZENE	3	65.3	1.301 PPH
UNKNOWN	4	74.0	19.7 US
UNKNOWN	5	90.7	9.7 US
UNKNOWN	6	93.4	10.2 US
TOLUENE	7	115.2	8.107 PPH
TOLUENE	8	133.2	2.915 PPH
UNKNOWN	9	141.2	10.1 US
UNKNOWN	10	172.2	2.6 US
UNKNOWN	11	195.2	12.9 US
ETHYL BENZENE	12	212.2	1.799 PPH
PP XYLENE	13	236.4	534.8 PPH
PP XYLENE	14	285.1	3.105 PPH
UNKNOWN	15	325.0	3.3 US
UNKNOWN	16	351.1	2.1 US
UNKNOWN	17	382.2	2.9 US

05-004RBH 10.5 FT

PHOTOVAC



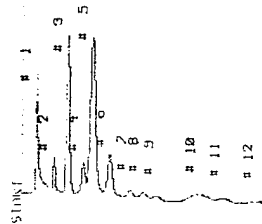
STOP # 450.0
SAMPLE LIBRARY 1 AUG 6 1994 16:20
ANALYSIS # 28 MARK ESCOBAR
INTERNAL TEMP 35 HAYWARD ANG
GAIN 2 5-4RBH 10.5 SUL

COMP. NAME PEAK R.T. AREA/PPH

UNKNOWN	1	79.0	303.9 mUS
UNKNOWN	2	92.3	294.6 mUS
BENZENE	3	65.2	31.2 PPH
UNKNOWN	4	73.2	2.2 US
UNKNOWN	5	91.6	2.3 US
UNKNOWN	6	100.3	2.7 US
UNKNOWN	7	113.9	9.483 PPH
UNKNOWN	8	134.0	2.5 US
UNKNOWN	9	142.0	6.8 US
UNKNOWN	10	171.2	6.5 US
ETHYL BENZENE	11	212.2	202.3 PPH
PP XYLENE	12	236.4	213.1 PPH
PP XYLENE	13	285.3	1.367 PPH
UNKNOWN	14	325.0	1.3 US
UNKNOWN	15	342.2	1.0 mUS
UNKNOWN	16	382.2	1.9 US

05-004RBH 14 FT

PHOTOVAC



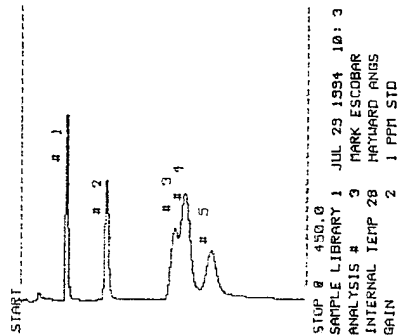
STOP # 450.0
SAMPLE LIBRARY 1 AUG 6 1994 16:29
ANALYSIS # 23 MARK ESCOBAR
INTERNAL TEMP 35 HAYWARD ANG
GAIN 2 5-4RBH 14FT SUL

COMP. NAME PEAK R.T. AREA/PPH

UNKNOWN	1	24.3	150.1 mUS
UNKNOWN	2	32.2	354.5 mUS
UNKNOWN	3	74.1	2.7 US
UNKNOWN	4	93.2	560.3 mUS
TOLUENE	5	113.8	1.203 PPH
UNKNOWN	6	142.0	353.3 mUS
UNKNOWN	7	173.2	132.2 mUS
UNKNOWN	8	195.2	102.2 mUS
ETHYL BENZENE	9	217.8	23.25 PPH
PP XYL	10	282.2	192.5 PPH
UNKNOWN	11	323.2	98.8 mUS
UNKNOWN	12	325.2	124.6 mUS

1 PPM STD

PHOTOVAC



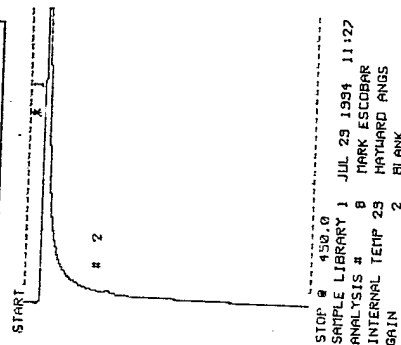
STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 10:13
 ANALYSIS # 3 MARK ESCOBAR
 INTERNAL TEMP 28 HAYWARD ANGUS
 GAIN 2 1 PPM STD

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
1	BENZENE	1	25.3	1.000 PPM
2	TOLUENE	2	139.6	1.000 PPM
3	ETHYLBENZENE	3	230.2	1.000 PPM
4	MP XYLENE	4	266.1	1.000 PPM
5	D XYLENE	5	308.3	1.000 PPM

BLANK

PHOTOVAC

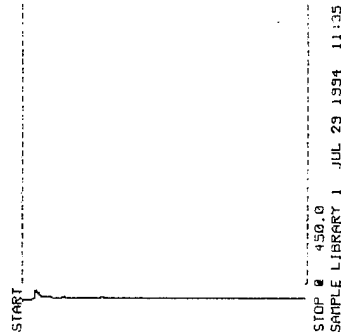


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 11:22
 ANALYSIS # 8 MARK ESCOBAR
 INTERNAL TEMP 29 HAYWARD ANGUS
 GAIN 2 BLANK

COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 29.7 15.8 US

05-001BH 1 FT

PHOTOVAC

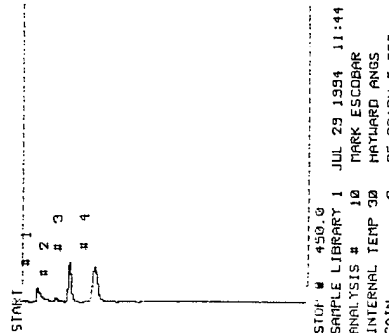


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 11:35
 ANALYSIS # 9 MARK ESCOBAR
 INTERNAL TEMP 23 HAYWARD ANGUS
 GAIN 2 05-001BH 1FT

COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 22.0 30.2 AUS
 UNKNOWN 2 56.3 19.9 AUS
 BENZENE 3 78.5 249.6 PPM
 UNKNOWN 4 119.2 1.0 US

05-001BH 5.5 FT

PHOTOVAC



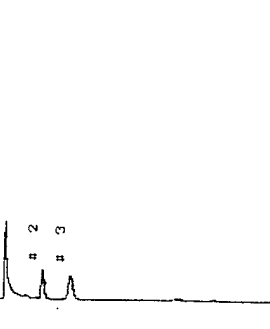
STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 11:44
 ANALYSIS # 10 MARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANGUS
 GAIN 2 05-001BH 5.5FT

COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 22.0 30.2 AUS
 UNKNOWN 2 56.3 19.9 AUS
 BENZENE 3 78.5 249.6 PPM
 UNKNOWN 4 119.2 1.0 US

05-001BH 6.5 FT

PHOTOVAC

START

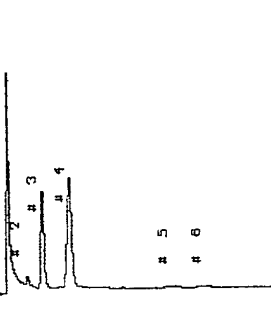


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 11:52
 ANALYSIS # 11 PARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANG'S
 GAIN 2 05-001BH 6.5FT
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 29.5 521.8 μS
 UNKNOWN 2 31.0 470.5 μS
 TOLUENE 3 135.2 213.7 PPB

05-001BH 10.5 FT

PHOTOVAC

START

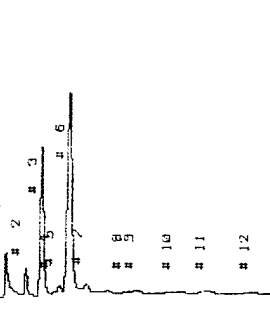


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 12:13
 ANALYSIS # 12 MARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANG'S
 GAIN 2 05-001BH 10.5FT
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 22.6 1.9 μS
 UNKNOWN 2 58.9 83.3 μS
 BENZENE 3 83.5 622.7 PPB
 TOLUENE 4 122.2 1.198 PPB
 O XYLENE 5 289.9 24.48 PPB
 UNKNOWN 6 344.8 83.4 μS

05-001BH 14 FT

PHOTOVAC

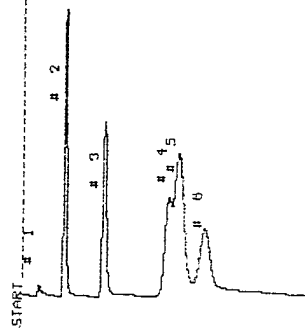
START



STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 12:17
 ANALYSIS # 13 MARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANG'S
 GAIN 2 05-001BH 14FT
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 29.1 229.9 μS
 UNKNOWN 2 62.1 502.9 μS
 UNKNOWN 3 88.3 2.7 μS
 UNKNOWN 5 116.8 62.2 μS
 TOLUENE 6 132.0 1.962 PPB
 UNKNOWN 7 159.2 128.5 μS
 UNKNOWN 8 222.0 23.9 μS
 ETHYL BENZENE 9 239.5 24.32 PPB
 O XYLENE 10 308.3 30.00 PPB
 UNKNOWN 11 352.9 183.6 μS
 UNKNOWN 12 422.3 21.6 μS

1 PPM STD

PHOTOVAC



STOP # 430.0
 SAMPLE LIBRARY 1 JUL 29 1994 12141
 ANALYSIS # 14 MARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANG
 GAIN 2 1 PPM STD

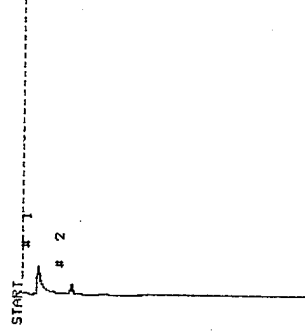
COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	28.5	21.1 μS
BENZENE	2	68.2	1.500 PPM
TOLUENE	3	134.2	1.464 PPM
ETHYLBENZENE	4	235.2	1.230 PPM
ETHYLBENZENE	5	250.2	2.548 PPM
O XYLENE	6	290.2	1.342 PPM

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
	BENZENE	1	68.2	1.000 PPM
	TOLUENE	2	131.2	1.000 PPM
	ETHYLBENZENE	3	235.2	1.000 PPM
	MP XYLENE	4	250.2	1.000 PPM
	O XYLENE	5	290.2	1.000 PPM

BLANK

PHOTOVAC

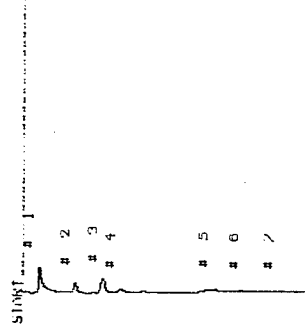


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 12151
 ANALYSIS # 15 MARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANG
 GAIN 2 BLANK

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	22.6	142.5 μS
UNKNOWN	2	80.8	95.2 μS

05-005BH 5.5 FT

PHOTOVAC

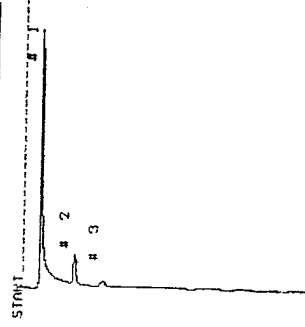


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 13125
 ANALYSIS # 16 MARK ESCOBAR
 INTERNAL TEMP 30 HAYWARD ANG
 GAIN 2 05-005BH 5.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	28.9	115.6 μS
UNKNOWN	2	86.2	143.4 μS
TOLUENE	3	130.4	0.000 PPM
UNKNOWN	4	152.6	81.2 μS
O XYLENE	5	200.3	19.20 PPM
UNKNOWN	6	349.3	33.2 μS

05-005BH 10.5 FT

PHOTOVAC

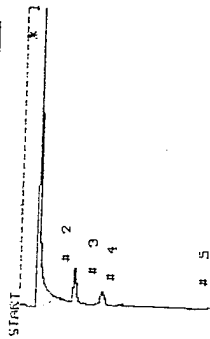


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 13133
 ANALYSIS # 17 MARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANG
 GAIN 2 05-005BH 10.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	28.6	2.3 μS
UNKNOWN	2	85.0	392.9 μS
TOLUENE	3	123.6	0.000 PPM

05-005BH 13 FT

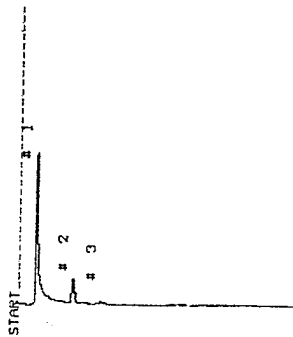
PHOTOVAC



STOP # 136.0
 SAMPLE LIBRARY 1 JUL 29 1994 13:42
 ANALYSIS # 18 PARK ESCOBAR
 INTERNAL TEMP 91 HAYWARD ANG
 GAIN 2 05-005BH 13FT
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 13.1 2.8 US
 UNKNOWN 2 13.2 525.0 mUS
 TOLUENE 3 13.3 0.000 PPM
 11 X 11.1 13.5 0.000 PPM

05-005BH 15.5 FT

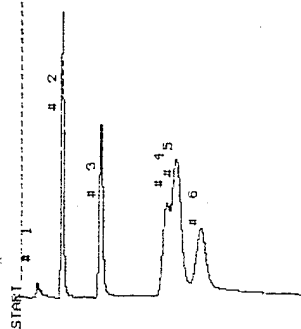
PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 13:50
 ANALYSIS # 13 PARK ESCOBAR
 INTERNAL TEMP 91 HAYWARD ANG
 GAIN 2 05-005BH 15.5FT
 COMPOUND NAME PEAK R.T. AREA/PPM
 UNKNOWN 1 15.1 1.1 US
 UNKNOWN 2 15.2 340.4 mUS
 TOLUENE 3 15.3 0.000 PPM

1 PPM STD

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 13:59
 ANALYSIS # 20 MARK ESCOBAR
 INTERNAL TEMP 31 HATHARD ANGUS
 GAIN 2 1 PPM STD

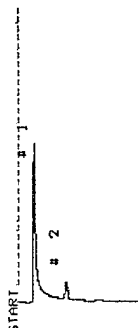
COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	28.2	26.3 PPM
BENZENE	2	68.3	1.000 PPM
TOLUENE	3	132.4	0.000 PPM
ETHYLBENZENE	4	232.6	364.6 PPM
m-XYLENE	5	253.5	202.4 PPM
p-XYLENE	6	253.3	1.000 PPM

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
BENZENE	1	68.3	1.000 PPM	
TOLUENE	2	132.4	1.000 PPM	
ETHYLBENZENE	3	232.6	1.000 PPM	
m-XYLENE	4	253.5	1.000 PPM	
p-XYLENE	5	253.3	1.000 PPM	

BLANK

PHOTOVAC

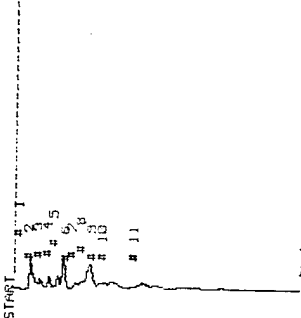


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 14:32
 ANALYSIS # 23 MARK ESCOBAR
 INTERNAL TEMP 32 HATHARD ANGUS
 GAIN 2 BLANK

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	27.0	1.3 US
UNKNOWN	2	26.1	214.5 mUS

05-004BH 2 FT

PHOTOVAC

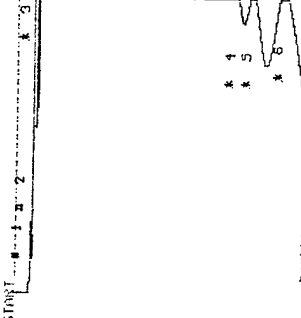


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 14:10
 ANALYSIS # 21 MARK ESCOBAR
 INTERNAL TEMP 32 HATHARD ANGUS
 GAIN 2 05-004BH 2FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	22.2	196.9 mUS
UNKNOWN	2	43.5	25.6 mUS
UNKNOWN	3	58.1	56.6 mUS
BENZENE	4	72.1	18.28 PPM
UNKNOWN	5	81.4	940.6 mUS
UNKNOWN	6	104.3	31.4 mUS
UNKNOWN	7	111.1	17.5 mUS
TOLUENE	8	124.0	134.0 PPM
ETHYLBENZENE	9	142.8	6.025 PPM
UNKNOWN	10	150.4	86.9 mUS
UNKNOWN	11	206.4	103.9 mUS

05-004BH 5.5 FT

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 14:41
 ANALYSIS # 24 MARK ESCOBAR
 INTERNAL TEMP 32 HATHARD ANGUS
 GAIN 2 05-004BH 5.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	23.0	10.9 mUS
UNKNOWN	2	29.8	413.1 mUS
UNKNOWN	3	38.2	6.0 US
UNKNOWN	4	135.5	11.3 mUS
UNKNOWN	5	325.6	23.9 US

04-003BH 6.5 FT

PHOTOVAC

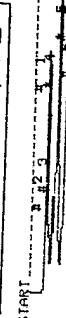


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 15:28
 ANALYSIS # 26 MARK ESCOBAR
 INTERNAL TEMP 32 HAYWARD ANG'S
 GAIN 2 04-003BH 6.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	2.4	45.8 mUS
UNKNOWN	2	28.9	42.1 mUS

05-004BH 14.5 FT

PHOTOVAC

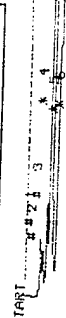


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 15:37
 ANALYSIS # 27 MARK ESCOBAR
 INTERNAL TEMP 32 HAYWARD ANG'S
 GAIN 2 05-004BH 14.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	26.3	1.9 US
UNKNOWN	2	30.4	333.9 mUS
UNKNOWN	3	36.3	422.8 mUS
UNKNOWN	4	40.8	4.2 US
UNKNOWN	5	55.2	16.6 US
BENZENE	6	68.3	702.0 PPB
UNKNOWN	7	79.9	33.3 US
UNKNOWN	8	159.2	254.6 US
ETHYLBENZENE	9	230.2	2.813 PPM
O XYLENE	10	281.5	14.16 PPM
O XYLENE	11	323.2	4.651 PPM
UNKNOWN	12	351.1	10.5 US
UNKNOWN	13	383.2	12.6 US

05-004BH 14.5 FT

PHOTOVAC

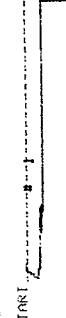


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 15:57
 ANALYSIS # 29 MARK ESCOBAR
 INTERNAL TEMP 33 HAYWARD ANG'S
 GAIN 2 5-4BH 14.5 5X

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.2	281.6 mUS
UNKNOWN	2	29.3	33.6 mUS
UNKNOWN	3	35.5	5.61.5 mUS
UNKNOWN	4	40.2	6.10 US
UNKNOWN	5	54.4	21.4 US
BENZENE	6	66.5	1.045 PPM
UNKNOWN	7	148.9	533.4 US
ETHYLBENZENE	8	226.4	3.652 PPM
O XYLENE	9	228.3	15.18 PPM
O XYLENE	10	312.8	5.656 PPM
UNKNOWN	11	348.4	12.6 US
UNKNOWN	12	386.2	20.9 US

05-004BH 10.5 FT

PHOTOVAC

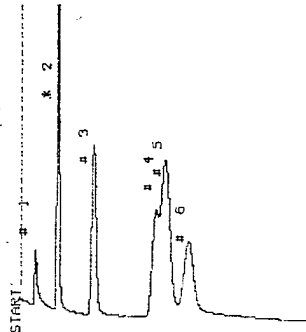


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 16: 8
 ANALYSIS # 30 MARK ESCOBAR
 INTERNAL TEMP 33 HAYWARD ANG'S
 GAIN 2 05-004BH 10.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	24.5	646.1 mUS
UNKNOWN	2	193.4	3.8 KUS
O XYLENE	3	305.9	3.338 PPM
UNKNOWN	4	322.7	14.0 US
UNKNOWN	5	365.2	13.0 US

1 PPM STD

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 16:19
 ANALYSIS # 31 MARK ESCOBAR
 INTERNAL TEMP 33 HAYWARD ANG
 GAIN 2 1 PPM STD

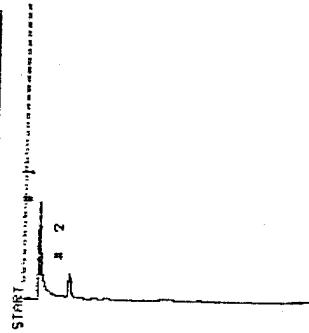
COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.5	429.7
UNKNOWN	2	60.4	4.9
UNKNOWN	3	118.3	4.3
ETHYLBENZENE	4	218.4	1.023
ETHYLBENZENE	5	232.2	2.188
MP XYLENE	6	270.3	640.6

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
BENZENE	1	60.4	1.000	PPM
TOLUENE	2	118.3	1.000	PPM
ETHYLBENZENE	3	218.4	1.000	PPM
MP XYLENE	4	232.2	1.000	PPM
MP XYLENE	5	232.2	1.000	PPM
D XYLENE	6	270.3	1.000	PPM

BLANK

PHOTOVAC

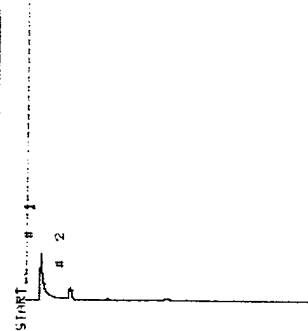


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 16:14
 ANALYSIS # 33 MARK ESCOBAR
 INTERNAL TEMP 33 HAYWARD ANG
 GAIN 2 BLANK

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	24.8	624.4
UNKNOWN	2	72.1	280.3

05-002BH 1 FT

PHOTOVAC

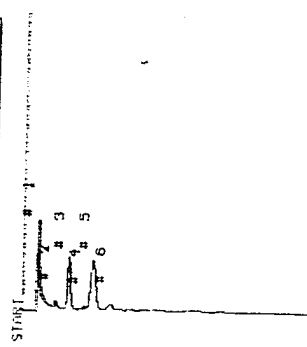


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 17:1
 ANALYSIS # 34 MARK ESCOBAR
 INTERNAL TEMP 33 HAYWARD ANG
 GAIN 2 05-002BH 1FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	24.9	293.3
UNKNOWN	2	71.5	123.8

05-002BH 5.5 FT

PHOTOVAC

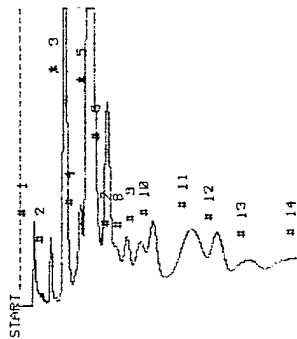


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 17:19
 ANALYSIS # 35 MARK ESCOBAR
 INTERNAL TEMP 33 HAYWARD ANG
 GAIN 2 05-002BH 5.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	24.9	553.0
UNKNOWN	2	51.7	46.6
UNKNOWN	3	72.1	804.4
UNKNOWN	4	92.8	11.8
TOLUENE	5	118.2	285.3
UNKNOWN	6	132.6	98.6

05-002BH 10.5 FT

PHOTOVAC

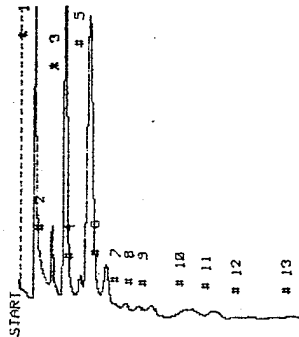


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 17:18
 ANALYSIS # 36 MARK ESCOBAR
 INTERNAL TEMP 33 HAYWARD ANG'S
 GAIN 2 05-002BH 10.5 FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.1	515.8
UNKNOWN	2	52.2	606.1
UNKNOWN	3	71.5	11.9
UNKNOWN	4	93.4	2.5
UNKNOWN	5	113.0	5.654
UNKNOWN	6	140.8	6.7
UNKNOWN	7	154.0	1.6
UNKNOWN	8	172.2	2.7
UNKNOWN	9	193.2	5.1
UNKNOWN	10	213.6	965.6
UNKNOWN	11	235.2	1.130
UNKNOWN	12	315.5	3.0
UNKNOWN	13	368.2	2.1

05-002BH 14.5 FT

PHOTOVAC

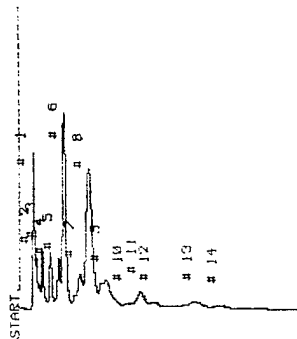


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 17:17
 ANALYSIS # 37 MARK ESCOBAR
 INTERNAL TEMP 33 HAYWARD ANG'S
 GAIN 2 05-002BH 14.5 FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	24.2	3.1
UNKNOWN	2	52.1	236.1
UNKNOWN	3	72.2	2.0
UNKNOWN	4	92.3	312.4
UNKNOWN	5	111.4	1.510
UNKNOWN	6	138.4	253.8
UNKNOWN	7	163.2	94.0
UNKNOWN	8	189.2	73.4
UNKNOWN	9	210.6	45.18
UNKNOWN	10	269.6	102.2
UNKNOWN	11	310.2	242.8
UNKNOWN	12	355.2	112.8

05-003BH 5.5 FT

PHOTOVAC

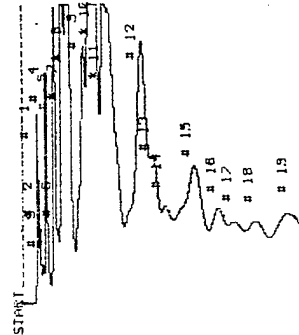


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 17:36
 ANALYSIS # 38 MARK ESCOBAR
 INTERNAL TEMP 33 HAYWARD ANG'S
 GAIN 2 05-003BH 5.5 FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.0	1.2
UNKNOWN	2	29.0	313.9
UNKNOWN	3	38.4	343.0
UNKNOWN	4	52.7	542.2
UNKNOWN	5	65.0	102.1
UNKNOWN	6	79.3	3.2
UNKNOWN	7	93.2	244.4
UNKNOWN	8	113.5	1.089
UNKNOWN	9	140.4	1.1
UNKNOWN	10	174.2	15.2
UNKNOWN	11	194.2	302.4
UNKNOWN	12	214.0	2.712
UNKNOWN	13	280.3	63.68
UNKNOWN	14	318.2	20.1

05-003BH 14 FT

PHOTOVAC

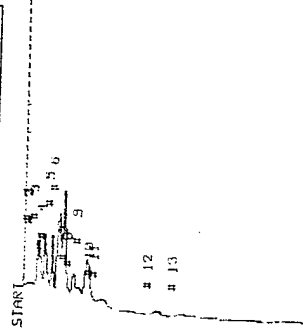


STOP # 450.0
 SAMPLE LIBRARY 1 JUL 29 1994 17:45
 ANALYSIS # 39 MARK ESCOBAR
 INTERNAL TEMP 33 HAYWARD ANG'S
 GAIN 2 05-003BH 14 FT

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.5	1.4
UNKNOWN	2	29.4	424.6
UNKNOWN	3	34.6	12.1
UNKNOWN	4	38.2	1.9
UNKNOWN	5	52.2	3.6
UNKNOWN	6	58.3	94.15
UNKNOWN	7	64.8	1.330
UNKNOWN	8	72.5	10.4
UNKNOWN	9	98.8	2.2
UNKNOWN	10	111.7	2.221
UNKNOWN	11	130.3	2.645
UNKNOWN	12	191.2	10.1
UNKNOWN	13	203.4	595.0
UNKNOWN	14	228.8	63.04
UNKNOWN	15	273.8	844.8
UNKNOWN	16	311.5	802.6
UNKNOWN	17	336.2	143.5
UNKNOWN	18	321.2	600.3

05-003BH 2 FT

PHOTOVAC

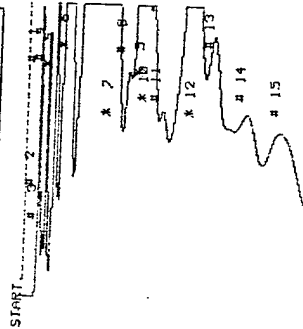


STOP # 450.0
SAMPLE LIBRARY 1 JUL 29 1994 17:54
ANALYSIS # 40 PARK ESCOBAR
INTERNAL TEMP 33 HAYWARD ANG
GAIN 2 05-003BH 2FT

COMPOUND NAME	PEAK	R.T.	AREA/PTH
UNKNOWN	1	23.9	341.8 μS
UNKNOWN	2	22.6	311.3 μS
UNKNOWN	3	26.5	532.8 μS
UNKNOWN	4	43.1	489.4 μS
BENZENE	5	61.1	326.4 PTH
UNKNOWN	6	64.5	1.6 US
UNKNOWN	7	85.6	228.6 μS
UNKNOWN	9	165.7	344.8 μS
ETHYLBENZENE	12	216.0	29.30 PTH
O XYLENE	13	231.2	5.233 PTH

05-003BH 10.5 FT

PHOTOVAC

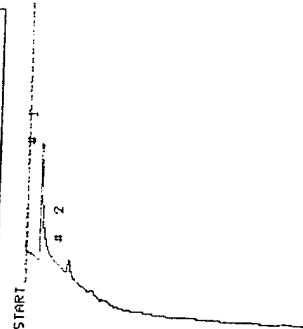


STOP # 450.0
SAMPLE LIBRARY 1 JUL 29 1994 18: 3
ANALYSIS # 41 PARK ESCOBAR
INTERNAL TEMP 33 HAYWARD ANG
GAIN 2 05-003BH 10.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PTH
UNKNOWN	1	24.0	2.2 US
UNKNOWN	2	22.5	596.3 μS
UNKNOWN	3	32.5	22.9 μS
UNKNOWN	4	36.3	2.1 US
UNKNOWN	5	48.6	5.8 US
BENZENE	6	66.2	3.672 PTH
TOLUENE	7	116.5	52.13 PTH
UNKNOWN	8	164.2	4.2 US
UNKNOWN	9	182.2	39.4 US
ETHYLBENZENE	10	198.8	1.934 PTH
ETHYLBENZENE	11	213.0	1.008 PTH
O XYLENE	12	282.1	12.05 PTH
O XYLENE	13	289.5	3.151 PTH
UNKNOWN	14	352.0	8.1 US

05-005BH 2 FT

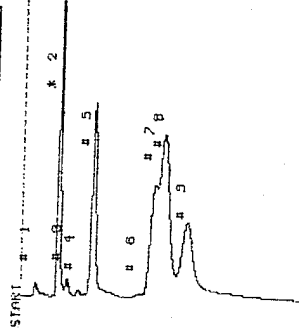
PHOTOVAC



STOP # 150.0
SAMPLE LIBRARY 1 JUL 29 1994 18:12
ANALYSIS # 42 PARK ESCOBAR
INTERNAL TEMP 33 HAYWARD ANG
GAIN 2 05-005BH 2FT

COMPOUND NAME	PEAK	R.T.	AREA/PTH
UNKNOWN	1	24.2	1.1 US
UNKNOWN	2	63.9	162.0 μS

PHOTOVAC



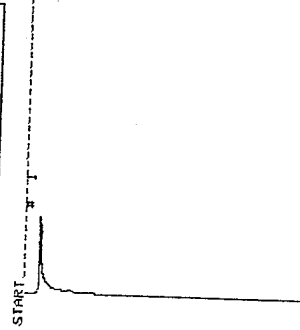
STOP @ 450.0
SAMPLE LIBRARY 1 AUG 1 1994 9:54
ANALYSIS # 6 MARK ESCOBAR
INTERNAL TEMP 27 MAYUARD ANG'S
GAIN 2 1 PPM STD

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.5	22.0 MUS
UNKNOWN	2	60.1	4.5 US
UNKNOWN	3	75.3	143.7 MUS
UNKNOWN	4	52.4	78.0 MUS
UNKNOWN	5	115.6	4.2 US
UNKNOWN	6	139.2	35.8 MUS
UNKNOWN	7	216.6	3.9 US
UNKNOWN	8	230.4	31.2 US
UNKNOWN	9	240.3	5.0 US

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
	BENZENE	1	60.1	1.000 PPM
	TOLUENE	2	115.6	1.000 PPM
	ETHYLBENZENE	3	216.0	1.000 PPM
	MP XYLENE	4	230.4	1.000 PPM
	O XYLENE	5	266.9	1.000 PPM

PHOTOVAC



STOP # 450.0
SAMPLE LIBRARY 1 AUG 1 1994 10: 0
ANALYSIS # 7 MARK ESCOBAR
INTERNAL TEMP 27 HAYWARD ANGUS
GAIN 2 BLANK

COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	26.1	517.8 mUs

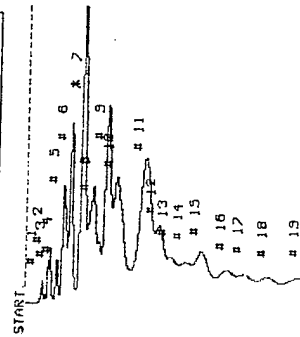
PHOTOVAC



STOP @ 450.0
SAMPLE LIBRARY 1 AUG 1 1994 11:58
ANALYSIS # MARK ESCOBAR
INTERNAL TEMP 28 HAYWARD ANG
GAIN 5-484 5

COMPOUND NAME	PEAK	R.T.	AREA/HT
UNKNOWN	1	22.5	102.1 mUs
UNKNOWN	2	34.2	340.1 mUs
UNKNOWN	3	33.0	2.1 US
UNKNOWN	4	41.3	3.9 US
UNKNOWN	5	53.3	4.1 US
UNKNOWN	6	60.5	46.3 US
UNKNOWN	7	102.3	149.2 US
UNKNOWN	8	133.1	33.5 US
UNKNOWN	9	130.1	2.62 US
ETHYLBENZENE	10	212.4	2,814 PPH
MP XYLENE	11	231.0	601.9 PPH
O XYLENE	12	234.9	1,232 PPH
UNKNOWN	13	261.1	2,289 PPH
UNKNOWN	14	320.8	2.2 US
UNKNOWN	15	346.6	6.1 US
UNKNOWN	16	385.2	2.3 US

PHOTOVAC



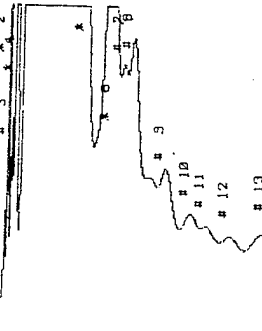
STOF @ 450.0
SAMPLE LIBRARY 1 AUG 1 1994 12:41
ANALYSTS # 10 MARK ESCOBAR
INTERNAL TEMP 29 HAYWARD ANGUS
GAIN 2

CUT	CLAU	NOTE		AREA-APPT	PEAK R-NH ₂
UNKNOWN			1	79.6	85.5 mUS
UNKNOWN			2	79.3	285.7 mUS
UNKNOWN			3	43.1	337.4 mUS
UNKNOWN			4	53.7	402.0 mUS
BENZILIC			5	69.3	530.8 PPH
UNKNOWN			6	74.2	73.5 US
UNKNOWN			7	92.2	8.9 US
TOLUENE			8	112.0	1,020 PPH
UNKNOWN			9	132.0	3.6 US
UNKNOWN			10	146.7	3.2 US
UNKNOWN			11	152.2	6.8 US
EHTLITURENE			12	214.8	430.6 PPH
PP XYLENE			13	234.0	41.29 PPH
O XYLENE			14	238.4	12.81 PPH
P XYLENE			15	283.5	134.5 PPH
UNKNOWN			16	324.1	328.5 mUS
UNKNOWN			17	350.2	61.5 mUS
UNKNOWN			18	383.2	286.3 mUS

05-004BH 10.5 FT

PHOTOVAC

START

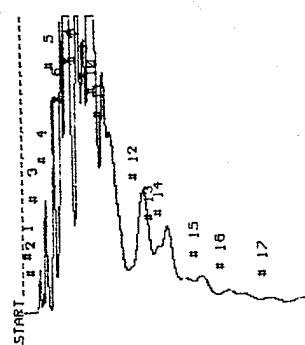


STOP # 450.0
 SAMPLE LIBRARY 1 AUG 1 1994 13:0
 ANALYSIS # 11 MARK ESCOBAR
 INTERNAL TEMP 29 HATUARD ANG
 GAIN 2 5-4 10.5FT 20UL

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.2	612.8 μS
UNKNOWN	2	23.1	2.4 US
UNKNOWN	3	34.6	1.3 US
UNKNOWN	4	40.0	12.1 US
UNKNOWN	5	102.2	1.7 KUS
UNKNOWN	6	189.3	55.1 US
ETHYLBENZENE	7	213.0	1.894 PPM
UNKNOWN	8	222.4	2.003 PPM
0 XYLENE	9	280.3	250.5 PPM
UNKNOWN	10	321.4	652.1 μS
UNKNOWN	11	345.2	62.8 μS
UNKNOWN	12	385.2	382.8 μS
UNKNOWN	13	440.0	484.5 μS

05-004BH 10.5 FT

PHOTOVAC

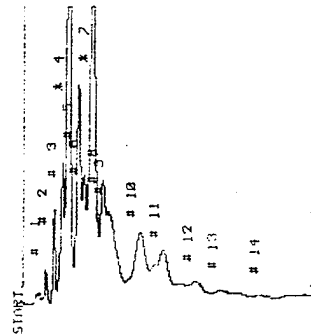


STOP # 450.0
 SAMPLE LIBRARY 1 AUG 1 1994 13:10
 ANALYSIS # 12 MARK ESCOBAR
 INTERNAL TEMP 29 HATUARD ANG
 GAIN 2 5-4 10.5FT SUL

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	28.5	214.7 μS
UNKNOWN	2	35.1	34.6 μS
UNKNOWN	3	33.3	1.1 US
UNKNOWN	4	54.1	2.8 US
UNKNOWN	5	62.5	5.6 US
UNKNOWN	6	76.3	19.8 US
UNKNOWN	7	93.0	12.9 US
UNKNOWN	8	103.3	6.0 US
UNKNOWN	9	114.5	5.500 PPM
TOLUENE	10	130.2	7.5 US
UNKNOWN	11	142.4	9.7 US
UNKNOWN	12	195.2	8.1 US
ETHYLBENZENE	13	219.6	528.4 PPM
0 XYLENE	14	232.8	427.2 PPM
UNKNOWN	15	288.3	72.43 PPM
UNKNOWN	16	329.5	190.0 μS
UNKNOWN	17	335.2	94.5 μS

05-004BH 14.5 FT

PHOTOVAC

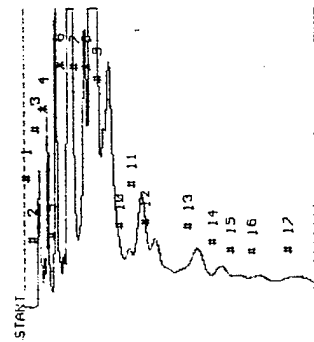


STOP # 450.0
 SAMPLE LIBRARY 1 AUG 1 1994 13:39
 ANALYSIS # 15 MARK ESCOBAR
 INTERNAL TEMP 38 HATUARD ANG
 GAIN 2 5-4 10.5FT SUL

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	38.1	262.3 μS
UNKNOWN	2	52.1	1.1 US
BENZENE	3	64.5	563.0 PPM
UNKNOWN	4	72.8	12.6 US
UNKNOWN	5	90.4	4.8 US
UNKNOWN	6	98.8	2.2 US
UNKNOWN	7	103.9	3.259 PPM
UNKNOWN	8	128.8	3.3 US
UNKNOWN	9	132.6	3.2 US
UNKNOWN	10	182.2	2.6 US
0 XYLENE	11	224.4	216.4 PPM
UNKNOWN	12	225.9	42.61 PPM
UNKNOWN	13	315.5	112.2 μS
UNKNOWN	14	329.2	48.6 μS

05-004BH 14.5 FT

PHOTOVAC

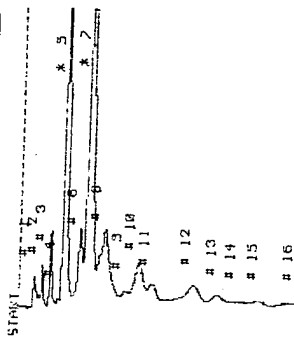


STOP # 450.0
 SAMPLE LIBRARY 1 AUG 1 1994 13:48
 ANALYSIS # 16 MARK ESCOBAR
 INTERNAL TEMP 31 HATUARD ANG
 GAIN 2 5-4 10.5FT SUL

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	24.8	808.2 μS
UNKNOWN	2	33.9	142.0 μS
UNKNOWN	3	32.3	1.5 US
UNKNOWN	4	51.9	4.0 US
BENZENE	5	64.1	59.12 PPM
UNKNOWN	6	72.3	25.3 US
UNKNOWN	7	98.2	7.1 US
TOLUENE	8	110.4	7.935 PPM
UNKNOWN	9	136.0	13.5 US
UNKNOWN	10	168.7	1.6 US
UNKNOWN	11	188.2	5.3 US
ETHYLBENZENE	12	203.4	634.3 PPM
0 XYLENE	13	224.5	533.2 PPM
UNKNOWN	14	313.1	413.0 μS
UNKNOWN	15	341.2	17.8 μS
UNKNOWN	16	375.2	169.1 μS

05-004BH 14.5 FT

PHOTOVAC

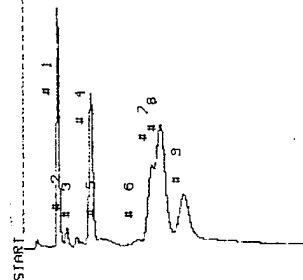


STOP # 450.0
 SAMPLE LIBRARY 1 AUG 1 1994 13:57
 ANALYSIS # 17 MARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD MDS
 GAIN 2 05-04BH 14.5 FT

COMP NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	25.1	161.0 MVS
UNKNOWN	2	32.3	254.3 MVS
UNKNOWN	3	51.3	806.6 MVS
UNKNOWN	5	72.3	7.2 US
UNKNOWN	6	72.9	1.4 US
TULLIENE	7	109.5	3.170 PPH
UNKNOWN	8	136.0	3.2 US
UNKNOWN	9	163.2	63.2 MVS
UNKNOWN	10	188.2	1.0 US
ETHYLBENZENE	11	210.0	47.69 PPH
0 X1114L	12	225.2	204.0 PPH
UNKNOWN	13	313.3	224.0 MVS
UNKNOWN	14	343.0	18.9 MVS
UNKNOWN	15	376.2	96.6 MVS

1 PPM STD

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 1 1994 14:12
 ANALYSIS # 18 MARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANGUS
 GAIN 2 1 PPM STD

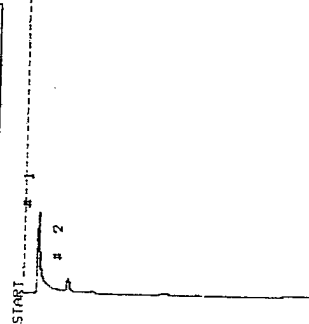
COMPOUND NAME	PEAK	R.T.	AREA/PPM
BENZENE	1	58.1	658.6 PPM
UNKNOWN	2	72.5	221.7 mUS
UNKNOWN	3	89.5	114.7 mUS
TOLUENE	4	111.9	245.6 PPM
TOLUENE	5	122.6	12.92 PPM
UNKNOWN	6	167.2	43.4 mUS
ETHYL BENZENE	7	210.0	630.2 PPM
ETHYL BENZENE	8	223.2	1.465 PPM
O XYLENE	9	261.2	546.3 PPM

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
	BENZENE	1	58.1	1.000 PPM
	TOLUENE	2	111.4	1.000 PPM
	ETHYL BENZENE	3	210.0	1.000 PPM
	HP XYLENE	4	223.2	1.000 PPM
	O XYLENE	5	261.2	1.000 PPM

BLANK

PHOTOVAC

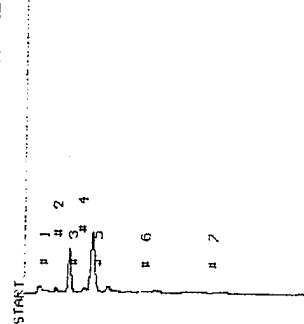


STOP # 450.0
 SAMPLE LIBRARY 1 AUG 1 1994 14:34
 ANALYSIS # 20 MARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANGUS
 GAIN 2 BLANK

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	24.7	430.6 mUS
UNKNOWN	2	21.7	146.1 mUS

05-002BH 10.5 FT

PHOTOVAC

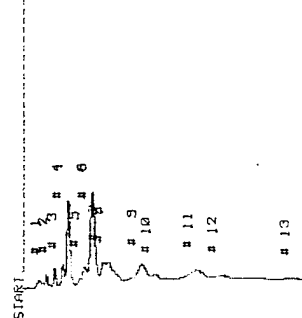


STOP # 450.0
 SAMPLE LIBRARY 1 AUG 1 1994 14:47
 ANALYSIS # 21 MARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANGUS
 GAIN 2 5-2BH 10.5F 20UL

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	51.7	33.3 mUS
UNKNOWN	2	72.5	684.3 mUS
UNKNOWN	3	97.6	14.7 mUS
TOLUENE	4	110.2	392.9 PPM
UNKNOWN	5	176.0	112.4 mUS
LIMIT BENZENE	6	210.0	1.034 PPM
UNKNOWN	7	214.7	23.7 mUS

05-003BH 10.5 FT

PHOTOVAC

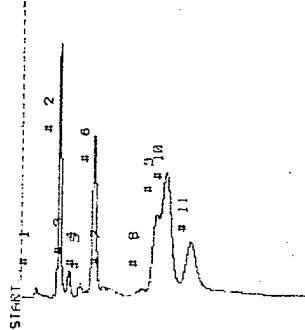


STOP # 450.0
 SAMPLE LIBRARY 1 AUG 1 1994 14:57
 ANALYSIS # 22 MARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANGUS
 GAIN 2 5-3BH 10.5FT 5UL

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	32.8	27.1 mUS
UNKNOWN	2	51.7	175.8 mUS
BENZENE	3	64.3	21.61 PPM
UNKNOWN	4	72.5	1.3 US
UNKNOWN	5	98.2	454.5 mUS
TOLUENE	6	110.2	225.8 PPM
UNKNOWN	7	128.8	530.6 mUS
UNKNOWN	8	135.2	844.6 mUS
UNKNOWN	9	188.2	525.6 mUS
ETHYL BENZENE	10	203.4	4.523 PPM
O XYLENE	11	274.5	214.2 PPM
UNKNOWN	12	313.1	94.5 mUS

1 PPM STD

PHOTOVAC



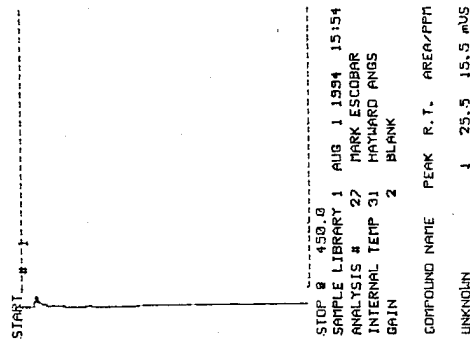
COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	2.17	16.3 PPM
BENZENE	2	61.2	1.123 PPM
UNKNOWN	3	22.1	346.3 PPM
UNKNOWN	4	95.5	168.2 PPM
TOLUENE	6	112.1	1.048 PPM
UNKNOWN	7	134.4	32.3 PPM
ETHYL BENZENE	8	196.2	90.05 PPM
MP XYLENE	9	213.6	513.0 PPM
MP XYLENE	10	273.4	1.128 PPM
O XYLENE	11	272.4	1.231 PPM

PHOTOVAC

1	COMPOUND	ID #	R.T.	LIMIT
	BENZENE	1	61.2	1.000 PPM
	TOLUENE	2	117.1	1.000 PPM
	ETHYLBENZENE	3	219.6	1.000 PPM
	MP XYLENE	4	233.4	1.000 PPM
	O XYLENE	5	272.4	1.000 PPM

BLANK

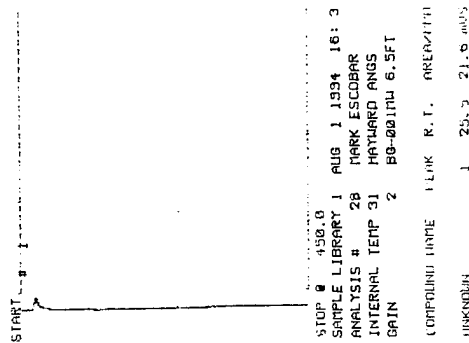
PHOTOVAC



COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.5	15.5 PPM

BG-001MW 6.5 FT

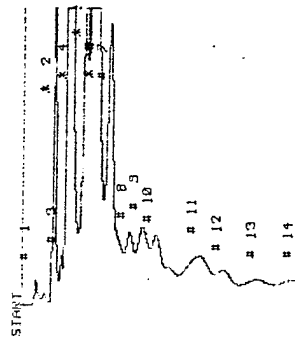
PHOTOVAC



COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.5	21.0 PPM

BG-001MW 10.5 FT

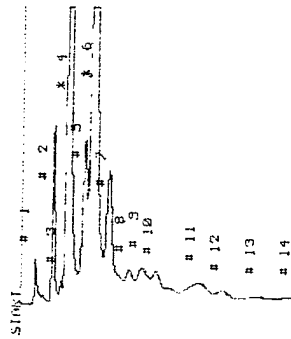
PHOTOVAC



COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	25.6	107.3 PPM
UNKNOWN	2	53.8	5.6 PPM
BENZENE	3	62.3	130.3 PPM
UNKNOWN	4	72.4	36.2 PPM
UNKNOWN	5	102.2	10.5 PPM
TOLUENE	6	115.3	5.912 PPM
UNKNOWN	7	141.6	12.5 PPM
UNKNOWN	8	174.2	3.1 PPM
UNKNOWN	9	194.2	4.6 PPM
ETHYL BENZENE	10	212.2	316.1 PPM
O XYLENE	11	245.1	431.6 PPM
UNKNOWN	12	274.1	322.4 PPM
UNKNOWN	13	272.2	402.2 PPM

BG-001MW 10.5 FT

PHOTOVAC

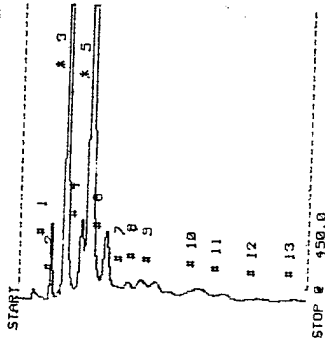


STOP # 450.0
 SAMPLE LIBRARY 1 AUG 1 1994 16:21
 ANALYSIS # 30 MARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANG
 GAIN 2 BG-001MW 10.5 58UL

COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	25.7	275.1
UNKNOWN	2	51.3	2.1
BENZENE	3	62.3	36.46
UNKNOWN	4	26.9	18.4
UNKNOWN	5	103.0	2.8
TOLUENE	6	114.1	9.068
UNKNOWN	7	141.2	2.9
UNKNOWN	8	174.2	222.8
UNKNOWN	9	191.2	323.2
ETHYLBENZENE	10	212.2	81.33
UNKNOWN	11	261.3	248.8
UNKNOWN	12	323.2	193.2
UNKNOWN	13	376.2	173.8

BG-001MW 10.5 FT

PHOTOVAC

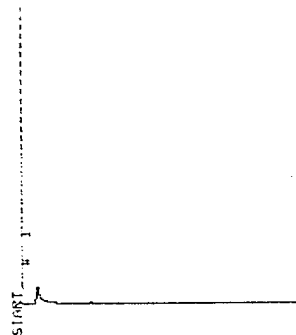


STOP # 450.0
 SAMPLE LIBRARY 1 AUG 1 1994 16:31
 ANALYSIS # 31 MARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANG
 GAIN 2 BG-001MW 10.5 28UL

COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	54.1	853.6
BENZENE	2	62.1	4.004
UNKNOWN	3	25.8	2.2
UNKNOWN	4	102.2	1.4
TOLUENE	5	113.6	1.6
UNKNOWN	6	141.6	1.6
UNKNOWN	7	175.2	132.9
UNKNOWN	8	195.7	245.8
ETHYLBENZENE	9	219.8	60.83
UNKNOWN	10	288.3	161.9
UNKNOWN	11	322.7	34.3
UNKNOWN	12	382.2	128.8

BG-001MW 15.5 FT

PHOTOVAC

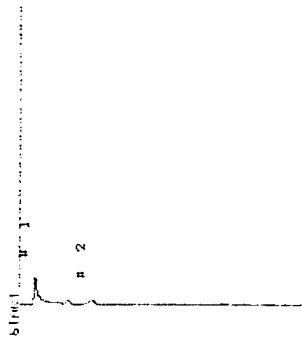


STOP # 450.0
 SAMPLE LIBRARY 1 AUG 1 1994 16:45
 ANALYSIS # 32 MARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANG
 GAIN 2 BG-001MW 15.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	26.1	32.1
UNKNOWN	2	32.1	32.1

BG-001MW 20.5 FT

PHOTOVAC



STOP # 450.0
 SAMPLE LIBRARY 1 AUG 1 1994 16:53
 ANALYSIS # 33 MARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANG
 GAIN 2 BG-001MW 20.5FT

COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	26.0	106.2
TOLUENE	2	115.6	20.84

BG-001MW 25.5 FT

PHOTOVAC

START

2
3
4

STOP # 450.0
SAMPLE LIBRARY 1 AUG 1 1994 17:12
ANALYSIS # 34 MARK ESCOBAR
INTERNAL TEMP 31 MATIARD ANG
GAIN 2 BG-001MW 25.5 FT

COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	26.0	949.5 mUS
UNKNOWN	2	22.5	242.3 mUS
TOLUENE	4	115.3	93.03 PPH

BG-001MW 30.5 FT

PHOTOVAC

START

2
3
4
5

STOP # 450.0
SAMPLE LIBRARY 1 AUG 1 1994 17:11
ANALYSIS # 35 MARK ESCOBAR
INTERNAL TEMP 31 MATIARD ANG
GAIN 2 BG-001MW 30.5 FT

COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	28.1	301.7 mUS
UNKNOWN	2	55.1	13.0 mUS
UNKNOWN	3	22.5	172.1 mUS
TOLUENE	4	116.2	57.00 PPH
UNKNOWN	5	132.2	46.7 mUS

05-003BH 14 FT

PHOTOVAC

STOP 4 450.0
 SAMPLE LIBRARY 1 AUG 1 1994 15: 7
 ANALYSIS # 23 DARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANG
 GAIN 2 5-3BH 14FT SUL

COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	25.2	122.9
BENZENE	2	69.5	8.585
UNKNOWN	3	72.3	103.9
TOLUENE	4	110.2	48.23
UNKNOWN	5	188.7	22.6

05-003BH 14 FT

PHOTOVAC

STOP 4 450.0
 SAMPLE LIBRARY 1 AUG 1 1994 15:17
 ANALYSIS # 24 DARK ESCOBAR
 INTERNAL TEMP 31 HAYWARD ANG
 GAIN 2 5-3BH 14FT 28UL

COMPOUND NAME	PEAK	R.T.	AREA/PPH
UNKNOWN	1	32.3	101.3
UNKNOWN	2	51.9	252.8
UNKNOWN	3	64.2	528.7
UNKNOWN	4	72.9	1.0
UNKNOWN	5	98.8	328.5
TOLUENE	6	110.5	514.2
UNKNOWN	7	120.8	236.4
UNKNOWN	8	180.2	411.0
ETHYLBENZENE	9	210.6	4.152
O XYLENE	10	225.9	98.73
UNKNOWN	11	315.5	52.8
UNKNOWN	12	328.2	40.2

APPENDIX E

AQUIFER SLUG TEST DATA

SECTION E.1 INTRODUCTION

On 13 October, 1994, rising head (slug-out) slug tests were conducted in monitoring wells 04-001MW, 04-002MW, 05-001MW, 05-002MW, and 05-003MW, and background monitoring well BG-001MW at Installation Restoration Program (IRP) Sites No. 4 and No. 5 to estimate the hydraulic conductivity of the first water-bearing zone beneath the Hayward Air National Guard Station (ANGS).

The slug tests were conducted by lowering a solid PVC slug, approximately 1.5 inches in diameter and 10 feet in length fully below the water surface in the monitoring wells. Prior to insertion, the slug was decontaminated according to protocols specified in the investigation Work Plan. Water level displacements effected by the slug were measured with a pressure transducer placed at the bottom of the well and recorded by an automatic data logger. After the data logger indicated that the water level in the well had returned to approximately pre-displacement levels, the slug was rapidly removed from the well resulting in a drop in water level. The water level rise after slug removal was automatically recorded at closely spaced time intervals by the data logger. The tests were terminated when the water levels in the well returned to approximately pre-displacement levels.

Raw data from the slug tests was downloaded in the office to a computer file and analyzed by the Bouwer and Rice Method (Bouwer and Rice, 1976) for unconfined aquifers using the software program "AQTESOLV" Version 1.1 developed by Geraghty and Miller, Inc. The program implements automatic curve matching through nonlinear least-squares parameter estimation in addition to optional visual curve matching for the estimation of aquifer parameters.

Plotting of water level data generated during the slug test performed in monitoring well 05-003MW showed irregular pressure transients that were translated as water level permutations of up to 2.3 feet within the 0- to 1.8-second time interval of the test. The probable cause for the erratic data is disturbance of the pressure transducer and cable during withdrawal of the slug. The data stabilized after 1.8 seconds and is considered to be valid thereafter. The final hydraulic conductivity was estimated by excluding the erratic data. Sensitivity analysis showed that the exclusion of the erratic data resulted in an increase of 16.91 gpd/ft.

The raw data for each slug test with the match curves generated by AQTESOLV are included herein.

SLUG TEST METHODOLOGY

REFERENCE Bouwer, H. and R. C. Rice, 1976: *A Slug Test Method for Determining Hydraulic Conductivity of Unconfined Aquifers with Completely or Partially Penetrating Wells*, Water Resources research, Vol. 12, No. 3, pp. 423-428.

SOLUTION:

$$\ln S_o - \ln S_t = \frac{2KLt}{r_c^2 \ln(r_e/r_w)}$$

Where:

S_o = Initial drawdown in well due to instantaneous removal of water from well [L];

S_t = Drawdown in well at time "t" [L];

L = Length of saturated well screen interval [L];

r_c = Radius of well casing [L];

r_w = Radius of well (including filter pack) [L];

$\ln(r_e/r_w)$ = Empirical "shape factor" determined from reference tables (Bouwer and Rice, 1976); and

r_e = Equivalent radius over which hydraulic head loss occurs [L].

CRITICAL ASSUMPTIONS:

- 1) The water-bearing zone is representative of a homogenous, isotropic unconfined aquifer;
- 2) Drawdown of the water table around the well is negligible;
- 3) Groundwater flow above the water table (in the capillary fringe) is negligible; and
- 4) Hydraulic head losses as water enters the well (well losses) is negligible.

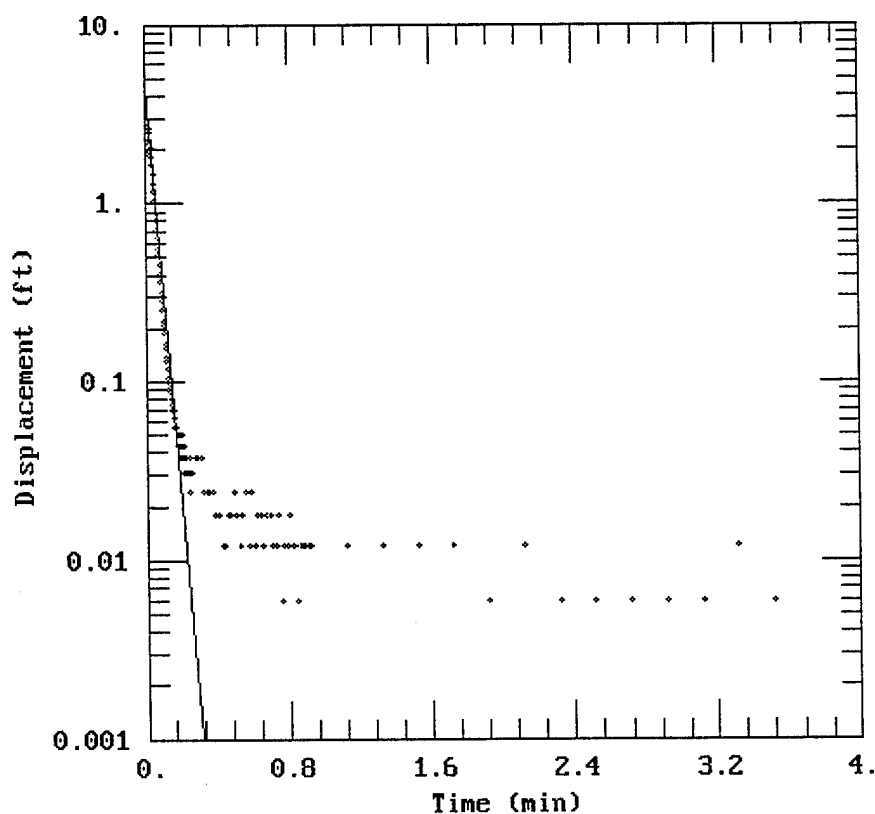
CLIENT: ANGR

COMPANY: OPERATIONAL TECHNOLOGIES CORP

LOCATION: HAYWARD ANG

PROJECT: 1315-189 DO 0031

Hayward ANG - IRP Site No. 4, 04-001MW



DATA SET:
04001MW.DAT
04/28/95

AQUIFER MODEL:
Unconfined
SOLUTION METHOD:
Bouwer-Rice

TEST DATA:
 $H_0 = 3.746$ ft
 $r_c = 0.083$ ft
 $r_w = 0.33$ ft
 $L = 17.59$ ft
 $b = 17.59$ ft
 $H = 17.59$ ft

PARAMETER ESTIMATES:
 $K = 0.09143$ ft/min
 $y_0 = 4.735$ ft

AQTESOLV

SLUG TEST DATA FOR 04-001MW

0	3.746
0.01	3.122
0.0133	1.905
0.0167	2.195
0.02	2.687
0.0233	2.51
0.0267	2.618
0.03	2.271
0.0333	2.05
0.0367	1.829
0.04	1.652
0.0433	1.463
0.0467	1.287
0.05	1.16
0.0533	1.028
0.0567	0.895
0.06	0.813
0.0633	0.719
0.0667	0.643
0.07	0.561
0.0733	0.517
0.0767	0.46
0.08	0.409
0.0833	0.365
0.0867	0.321
0.09	0.29
0.0933	0.252
0.0967	0.22
0.1	0.207
0.1033	0.189
0.1067	0.163
0.11	0.157
0.1133	0.138
0.1167	0.132
0.12	0.119
0.1233	0.106
0.1267	0.1
0.13	0.094
0.1333	0.088
0.1367	0.088
0.14	0.081
0.1433	0.075

0.1467	0.069
0.15	0.069
0.1533	0.056
0.1567	0.056
0.16	0.062
0.1633	0.056
0.1667	0.056
0.17	0.056
0.1733	0.05
0.1767	0.05
0.18	0.043
0.1833	0.043
0.1867	0.05
0.19	0.037
0.1933	0.05
0.1967	0.037
0.2	0.043
0.2033	0.043
0.2067	0.037
0.21	0.037
0.2133	0.031
0.2167	0.037
0.22	0.031
0.2233	0.031
0.2267	0.031
0.23	0.031
0.2333	0.031
0.2367	0.031
0.24	0.037
0.2433	0.024
0.2467	0.031
0.25	0.031
0.2667	0.037
0.2833	0.037
0.3	0.037
0.3167	0.024
0.3333	0.024
0.35	0.024
0.3667	0.024
0.3833	0.018
0.4	0.018
0.4167	0.012
0.4333	0.012
0.45	0.018
0.4667	0.018
0.4833	0.024

0.5	0.018
0.5167	0.012
0.5333	0.018
0.55	0.024
0.5667	0.012
0.5833	0.024
0.6	0.012
0.6167	0.018
0.6333	0.018
0.65	0.012
0.6667	0.018
0.6833	0.018
0.7	0.012
0.7167	0.012
0.7333	0.018
0.75	0.006
0.7667	0.012
0.7833	0.012
0.8	0.018
0.8167	0.012
0.8333	0.006
0.85	0.012
0.8667	0.012
0.8833	0.012
0.9	0.012
0.9167	0.012
1.1167	0.012
1.3167	0.012
1.5167	0.012
1.7167	0.012
1.9167	0.006
2.1167	0.012
2.3167	0.006
2.5167	0.006
2.7167	0.006
2.9167	0.006
3.1167	0.006
3.3167	0.012
3.5167	0.006
3.7167	0
3.9167	0
6.1167	0
6.7167	0

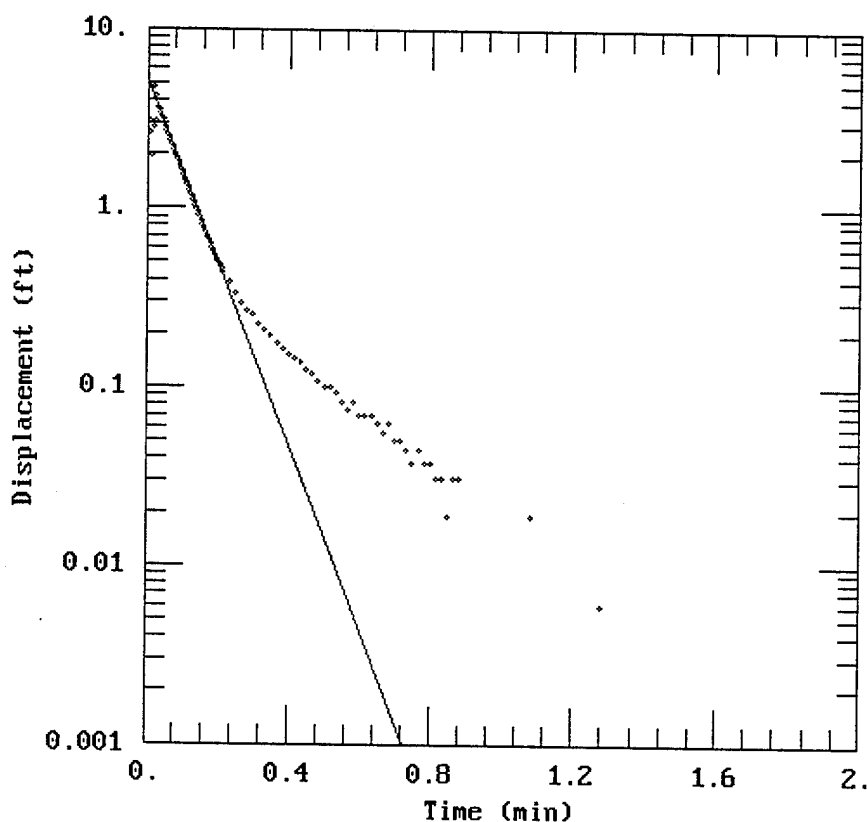
CLIENT: ANGRC

COMPANY: OPERATIONAL TECHNOLOGIES CORP

LOCATION: HAYWARD ANG

PROJECT: 1315-189 DO 0031

Hayward ANG - IRP Site No. 4, 04-002MW



DATA SET:
04002MW.DAT
04/28/95

AQUIFER MODEL:
Unconfined
SOLUTION METHOD:
Bouwer-Rice

TEST DATA:
 $H_0 = 4.607$ ft
 $r_c = 0.083$ ft
 $r_w = 0.33$ ft
 $L = 19.75$ ft
 $b = 19.75$ ft
 $H = 19.75$ ft

PARAMETER ESTIMATES:
 $K = 0.03518$ ft/min
 $y_0 = 5.09$ ft

AQTESOLV

SLUG TEST DATA FOR 04-002MW

0	5.325
0.0033	4.607
0.0066	2.613
0.01	3.004
0.0133	1.95
0.0166	2.853
0.02	4.777
0.0233	3.023
0.0266	4.222
0.03	3.61
0.0333	3.522
0.0366	3.332
0.04	3.2
0.0433	3.093
0.0466	2.941
0.05	2.821
0.0533	2.683
0.0566	2.556
0.06	2.487
0.0633	2.392
0.0666	2.285
0.07	2.203
0.0733	2.108
0.0766	2.026
0.08	1.95
0.0833	1.881
0.0866	1.799
0.09	1.723
0.0933	1.66
0.0966	1.597
0.1	1.534
0.1033	1.471
0.1066	1.414
0.11	1.363
0.1133	1.307
0.1166	1.25
0.12	1.206
0.1233	1.161
0.1266	1.117
0.13	1.073
0.1333	1.029

0.1366	0.985
0.14	0.953
0.1433	0.915
0.1466	0.884
0.15	0.839
0.1533	0.814
0.1566	0.783
0.16	0.764
0.1633	0.732
0.1666	0.7
0.17	0.682
0.1733	0.656
0.1766	0.631
0.18	0.606
0.1833	0.587
0.1866	0.568
0.19	0.549
0.1933	0.524
0.1966	0.511
0.2	0.498
0.2033	0.479
0.2066	0.467
0.21	0.454
0.2133	0.435
0.23	0.385
0.2466	0.334
0.2633	0.296
0.28	0.265
0.2966	0.252
0.3133	0.227
0.33	0.208
0.3466	0.195
0.3633	0.176
0.38	0.164
0.3966	0.151
0.4133	0.145
0.43	0.138
0.4466	0.126
0.4633	0.12
0.48	0.107
0.4966	0.101
0.5133	0.101
0.53	0.094
0.5466	0.082
0.5633	0.075
0.58	0.082

0.5966	0.069
0.6133	0.069
0.63	0.069
0.6466	0.063
0.6633	0.056
0.68	0.063
0.6966	0.05
0.7133	0.05
0.73	0.044
0.7466	0.037
0.7633	0.044
0.78	0.037
0.7966	0.037
0.8133	0.031
0.83	0.031
0.8466	0.019
0.8633	0.031
0.88	0.031
1.08	0.019
1.28	0.006
1.48	0
1.88	0
2.08	0
2.28	0
2.48	0

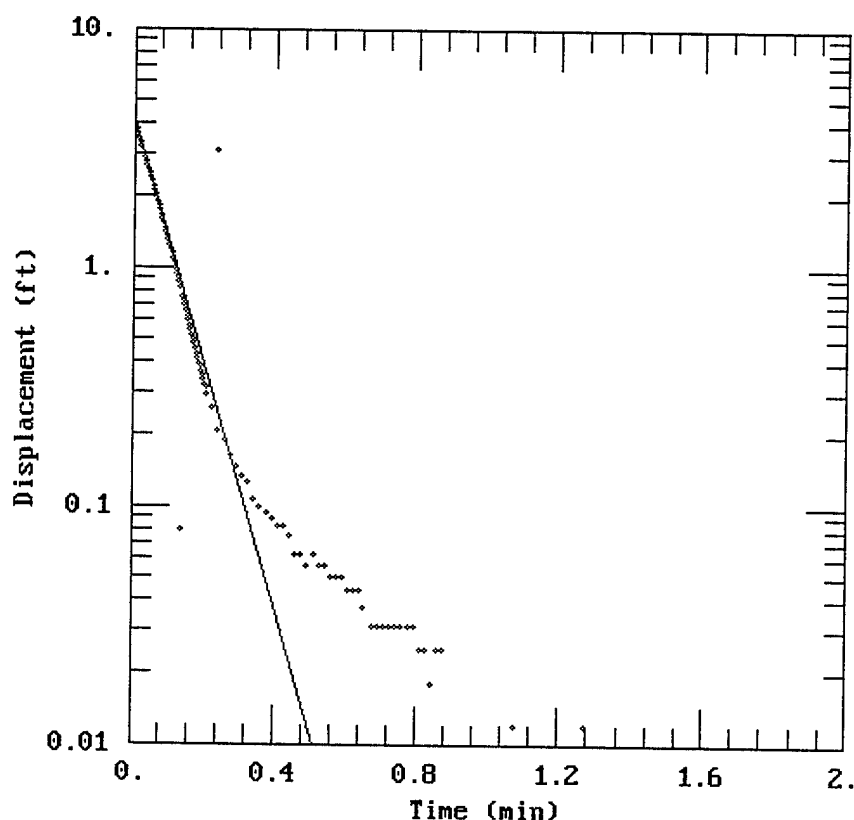
CLIENT: ANGRC

COMPANY: OPERATIONAL TECHNOLOGIES CORP

LOCATION: HAYWARD ANG

PROJECT: 1315-189 DO 0031

Hayward ANG - IRP Site No. 5, MW-1



DATA SET:

HAY1

01/25/95

AQUIFER MODEL:

Unconfined

SOLUTION METHOD:

Bouwer-Rice

TEST DATA:

$H_0 = 4.037$ ft

$r_c = 0.083$ ft

$r_w = 0.334$ ft

$L = 14.94$ ft

$b = 14.94$ ft

$H = 14.94$ ft

PARAMETER ESTIMATES:

$K = 0.007926$ ft/min

$y_0 = 4.069$ ft

AQTESOLV

SLUG TEST DATA FOR 05-001MW

0	4.037
0.0034	3.835
0.0067	3.772
0.01	3.608
0.0134	3.463
0.0167	3.331
0.02	3.211
0.0234	3.091
0.0267	2.978
0.03	2.87
0.0334	2.763
0.0367	2.662
0.04	2.561
0.0434	2.467
0.0467	2.378
0.05	2.303
0.0534	2.202
0.0567	2.12
0.06	2.038
0.0634	1.962
0.0667	1.886
0.07	1.811
0.0734	1.741
0.0767	1.672
0.08	1.602
0.0834	1.539
0.0867	1.47
0.09	1.413
0.0934	1.35
0.0967	1.3
0.1	1.237
0.1034	1.192
0.1067	1.142
0.11	1.091
0.1134	1.041
0.1167	0.997
0.12	0.946
0.1234	0.902
0.1267	0.871
0.13	0.826
0.1334	0.788
0.1367	0.757
0.14	0.719
0.1434	0.694
0.1467	0.656
0.15	0.624
0.1534	0.605
0.1567	0.574
0.16	0.549
0.1634	0.523
0.1667	0.498
0.17	0.479
0.1734	0.454
0.1767	0.435
0.18	0.416
0.1834	0.397
0.1867	0.385
0.19	0.366
0.1934	0.353
0.1967	0.34

0.2	0.321
0.2034	0.315
0.2067	0.296
0.2234	0.258
0.24	0.208
0.2567	0.189
0.2734	0.164
0.29	0.145
0.3067	0.132
0.3234	0.126
0.34	0.107
0.3567	0.1
0.3734	0.094
0.39	0.088
0.4067	0.082
0.4234	0.082
0.44	0.075
0.4567	0.063
0.4734	0.063
0.49	0.056
0.5067	0.063
0.5234	0.056
0.54	0.056
0.5567	0.05
0.5734	0.05
0.59	0.05
0.6067	0.044
0.6234	0.044
0.64	0.044
0.6567	0.037
0.6734	0.031
0.69	0.031
0.7067	0.031
0.7234	0.031
0.74	0.031
0.7567	0.031
0.7734	0.031
0.79	0.031
0.8067	0.025
0.8234	0.025
0.84	0.018
0.8567	0.025
0.8734	0.025
1.0734	0.012
1.2734	0.012
1.4734	0
2.0734	0
2.2734	0
2.8734	0
3.0734	0

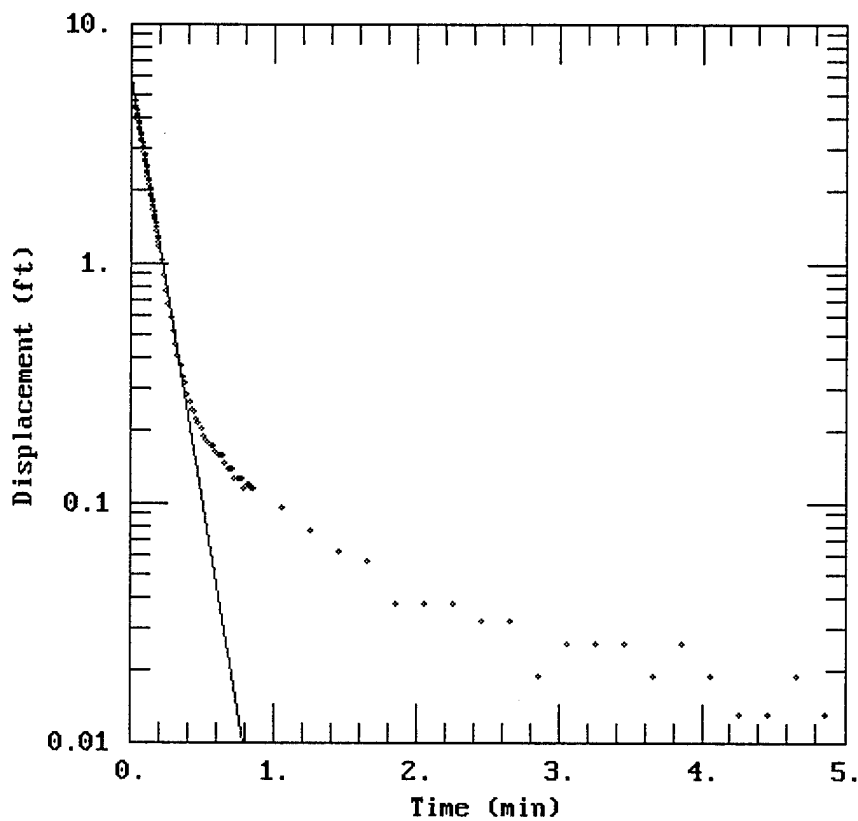
SLUG TEST DATA FOR 05-002MW

0	4.974
0.0033	4.854
0.0067	4.779
0.01	4.735
0.0133	4.665
0.0167	4.621
0.02	4.571
0.0233	4.514
0.0267	4.464
0.03	4.401
0.0333	4.363
0.0367	4.338
0.04	4.281
0.0433	4.249
0.0467	4.193
0.05	4.18
0.0533	4.136
0.0567	4.067
0.06	4.054
0.0633	4.029
0.0667	4.004
0.07	3.966
0.0733	3.934
0.0767	3.884
0.08	3.884
0.0833	3.846
0.0867	3.827
0.09	3.802
0.0933	3.77
0.0967	3.733
0.1	3.714
0.1033	3.701
0.1067	3.67
0.11	3.651
0.1133	3.619
0.1167	3.607
0.12	3.581
0.1233	3.531
0.1267	3.537
0.13	3.512
0.1333	3.481
0.1367	3.449
0.14	3.449
0.1433	3.424
0.1467	3.411
0.15	3.38
0.1533	3.367
0.1567	3.342
0.16	3.323
0.1767	3.235
0.1933	3.14
0.21	3.058
0.2267	2.97
0.2433	2.888
0.26	2.806
0.2767	2.73
0.2933	2.661
0.31	2.585
0.3267	2.516
0.3433	2.453

0.36	2.384
0.3767	2.314
0.3933	2.245
0.41	2.182
0.4267	2.119
0.4433	2.056
0.46	1.999
0.4767	1.93
0.4933	1.879
0.51	1.822
0.5267	1.766
0.5433	1.703
0.56	1.652
0.5767	1.602
0.5933	1.551
0.61	1.501
0.6267	1.45
0.6433	1.394
0.66	1.35
0.6767	1.305
0.6933	1.255
0.71	1.211
0.7267	1.16
0.7433	1.116
0.76	1.078
0.7767	1.034
0.7933	0.99
0.81	0.958
0.8267	0.921
1.0267	0.586
1.2267	0.391
1.4267	0.296
1.6267	0.233
1.8267	0.201
2.0267	0.176
2.2267	0.157
2.4267	0.138
2.6267	0.126
2.8267	0.113
3.0267	0.107
3.2267	0.094
3.4267	0.082
3.6267	0.082
3.8267	0.075
4.0267	0.069
4.2267	0.063
4.4267	0.056
4.6267	0.05
4.8267	0.05
5.0267	0.044
5.2267	0.037
5.4267	0.037
5.6267	0.031
5.8267	0.031
6.0267	0.025
6.2267	0.018
6.4267	0.018
6.6267	0.018
6.8267	0.018
7.0267	0.012

7.2267	0.012
7.4267	0.012
7.6267	0.012
7.8267	0.012
8.0267	0.018
8.2267	0.006
8.4267	0.006
8.6267	0.012
8.8267	0.006
9.0267	0.006
9.2267	0
9.4267	0
9.6267	0
9.8267	0
11.8267	0

Hayward ANGTS - IRP Site No. 5, MW-3



DATA SET:
HAY3A
01/25/95

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

TEST DATA:
H0 = 4.699 ft
 r_c = 0.083 ft
 r_w = 0.34 ft
L = 14.54 ft
b = 14.54 ft
H = 14.54 ft

PARAMETER ESTIMATES:
K = 0.005441 ft/min
y0 = 5.942 ft

AQTESOLV

SLUG TEST DATA FOR 05-003MW

0	3.545
0.0034	2.776
0.0067	1.363
0.01	1.994
0.0134	2.537
0.0167	2.41
0.02	3.514
0.0234	4.296
0.0267	3.98
0.03	4.699
0.0334	4.497
0.0367	4.422
0.04	4.296
0.0434	4.201
0.0467	4.094
0.05	3.974
0.0534	3.88
0.0567	3.772
0.06	3.678
0.0634	3.577
0.0667	3.495
0.07	3.394
0.0734	3.293
0.0767	3.218
0.08	3.142
0.0834	3.054
0.0867	2.984
0.09	2.902
0.0934	2.827
0.0967	2.757
0.1	2.701
0.1034	2.631
0.1067	2.555
0.11	2.492
0.1134	2.41
0.1167	2.354
0.12	2.284
0.1234	2.228
0.1267	2.171
0.13	2.108
0.1334	2.051
0.1367	1.988
0.14	1.937
0.1434	1.887
0.1467	1.83
0.15	1.78
0.1534	1.729
0.1567	1.672
0.16	1.628
0.1634	1.584
0.1667	1.534
0.17	1.502
0.1734	1.452
0.1767	1.408
0.18	1.363
0.1834	1.344
0.1867	1.294
0.19	1.256
0.1934	1.218
0.1967	1.18

0.2134	1.029
0.23	0.89
0.2467	0.77
0.2634	0.676
0.28	0.587
0.2967	0.524
0.3134	0.455
0.33	0.411
0.3467	0.373
0.3634	0.335
0.38	0.316
0.3967	0.284
0.4134	0.265
0.43	0.246
0.4467	0.24
0.4634	0.221
0.48	0.215
0.4967	0.202
0.5134	0.19
0.53	0.183
0.5467	0.177
0.5634	0.171
0.58	0.171
0.5967	0.164
0.6134	0.158
0.63	0.158
0.6467	0.158
0.6634	0.145
0.68	0.139
0.6967	0.139
0.7134	0.139
0.73	0.127
0.7467	0.127
0.7634	0.127
0.78	0.127
0.7967	0.114
0.8134	0.12
0.83	0.12
0.8467	0.114
0.8634	0.114
1.0634	0.095
1.2634	0.076
1.4634	0.063
1.6634	0.057
1.8634	0.038
2.0634	0.038
2.2634	0.038
2.4634	0.032
2.6634	0.032
2.8634	0.019
3.0634	0.026
3.2634	0.026
3.4634	0.026
3.6634	0.019
3.8634	0.026
4.0634	0.019
4.2634	0.013
4.4634	0.013
4.6634	0.019
4.8634	0.013

5.0634	0.013
5.2634	0.013
5.4634	0.007
5.6634	0.013
5.8634	0.019
6.0634	0.019
6.2634	0.007
6.4634	0.019
6.6634	0.013
6.8634	0.013
7.0634	0.013
7.2634	0.013
7.4634	0.013
7.6634	0.013

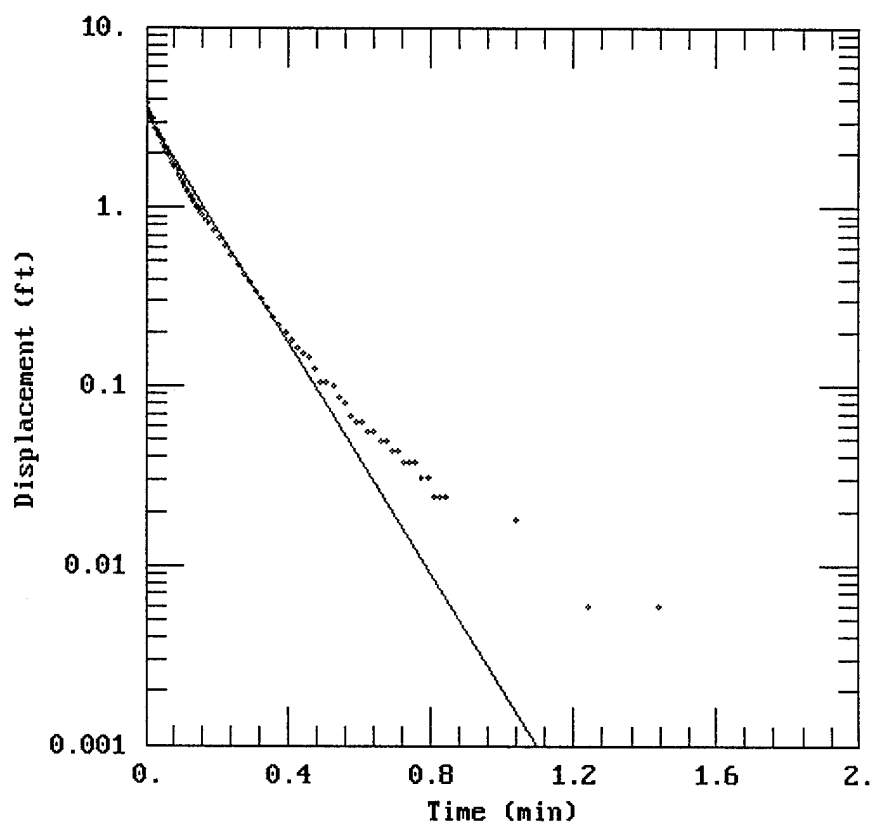
CLIENT: ANGRC

COMPANY: OPERATIONAL TECHNOLOGIES CORP

LOCATION: HAYWARD ANG

PROJECT: 1315-189 DO 0031

Hayward ANG - IRP Site No. 4, BG001MW



DATA SET:
BG001MW.DAT
04/28/95

AQUIFER MODEL:
Unconfined
SOLUTION METHOD:
Bouwer-Rice

TEST DATA:
H0 = 3.802 ft
r_c = 0.083 ft
r_w = 0.33 ft
L = 23.98 ft
b = 23.98 ft
H = 23.98 ft

PARAMETER ESTIMATES:
K = 0.01902 ft/min
y0 = 3.243 ft

AQTESOLU

SLUG TEST DATA FOR BS-001MW

0	3.802
0.0033	3.544
0.0066	3.374
0.01	3.279
0.0133	3.147
0.0166	3.103
0.02	2.97
0.0233	2.888
0.0266	2.787
0.03	2.68
0.0333	2.586
0.0366	2.51
0.04	2.428
0.0433	2.359
0.0466	2.283
0.05	2.214
0.0533	2.144
0.0566	2.075
0.06	2.018
0.0633	1.955
0.0666	1.892
0.07	1.841
0.0733	1.785
0.0766	1.728
0.08	1.684
0.0833	1.64
0.0866	1.589
0.09	1.545
0.0933	1.501
0.0966	1.431
0.1	1.419
0.1033	1.375
0.1066	1.337
0.11	1.299
0.1133	1.267
0.1166	1.236
0.12	1.198
0.1233	1.166
0.1266	1.141
0.13	1.116
0.1333	1.091
0.1366	1.059

0.14	1.04
0.1433	1.009
0.1466	0.983
0.15	0.971
0.1533	0.939
0.1566	0.92
0.16	0.901
0.1633	0.882
0.1666	0.857
0.17	0.845
0.1733	0.826
0.19	0.75
0.2066	0.681
0.2233	0.611
0.24	0.548
0.2566	0.485
0.2733	0.428
0.29	0.384
0.3066	0.34
0.3233	0.308
0.34	0.277
0.3566	0.245
0.3733	0.22
0.39	0.201
0.4066	0.182
0.4233	0.163
0.44	0.15
0.4566	0.144
0.4733	0.125
0.49	0.106
0.5066	0.106
0.5233	0.1
0.54	0.087
0.5566	0.081
0.5733	0.068
0.59	0.062
0.6066	0.062
0.6233	0.056
0.64	0.056
0.6566	0.049
0.6733	0.049
0.69	0.043
0.7066	0.043
0.7233	0.037
0.74	0.037
0.7566	0.037

0.7733	0.031
0.79	0.031
0.8066	0.024
0.8233	0.024
0.84	0.024
1.04	0.018
1.24	0.006
1.44	0.006
1.64	0
2.24	0

APPENDIX F

**CHEMICAL ANALYSES RESULTS FOR
QUALITY ASSURANCE/QUALITY CONTROL SAMPLES**

EXPLANATION OF TABLE ORGANIZATION AND NOMENCLATURE

Each table in the appendix is a matrix which consists of samples (listed in columns) and analyses (listed in rows). In some cases, the matrix consists of more samples (columns) and/or more analyses (rows) than can be presented on a single sheet. The method of presentation used is that for a specific set of parameters (rows) with the results for all the samples (columns) analyzed presented. The table continuation pages are labelled as such for each parameter. For the next set of parameters, the results are given for all the samples analyzed. The physical pages themselves are numbered sequentially as they appear in this appendix.

The following nomenclature is used in the tables:

Parameter:	Parameter for which the analysis was performed.
Location No.:	The sampling location identifier.
Sample Date:	The sampling date.
Lab Sample No.:	The numeric identifier assigned to the sample by the laboratory.
U:	Indicates sample was analyzed for but was not detected.

Table F.1
Summary of Volatile Organic Compounds Detected in Soil QA/QC Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

Location: Sample Date: Lab Sample No.:		04-004BH 1.5' Dup 07/28/94 941849-0011	04-004BH 7' MS 07/28/94 941849-0014	04-004BH 7' MSD 07/28/94 941849-0015	04-004BH 11.5' Dup 07/28/94 941849-0017
VOC	Matrix:	Soil	Soil	Soil	Soil
Acetone		10U	10U	10U	10U
Benzene		5U	60	64	5U
Bromodichloromethane		5U	5U	5U	5U
Bromoform		5U	5U	5U	5U
Bromomethane		10U	10U	10U	10U
2-Butanone		10U	10U	10U	10U
Carbon disulfide		5U	5U	5U	5U
Carbon tetrachloride		5U	5U	5U	5U
Chlorobenzene		5U	58	60	5U
Chlorodibromomethane		5U	5U	5U	5U
Chloroethane		10U	10U	10U	10U
2-Chloroethylvinyl ether		10U	10U	10U	10U
Chloroform		5U	5U	5U	5U
Chloromethane		10U	10U	10U	10U
1,1-Dichloroethane		5U	5U	5U	5U
1,2-Dichloroethane		5U	5U	5U	5U
1,1-Dichloroethene		5U	74	76	5U
Total 1,2-Dichloroethenes		5U	5U	5U	5U
1,2-Dichloropropane		5U	5U	5U	5U
cis-1,3-Dichloropropene		5U	5U	5U	5U
trans-1,3-Dichloropropene		5U	5U	5U	5U
Ethylbenzene		5U	5U	5U	5U
2-Hexanone		10U	10U	10U	10U
Methylene Chloride		5U	5U	5U	5
4-Methyl-2-pentanone		10U	10U	10U	10U
Styrene		5U	5U	5U	5U
1,1,2,2-Tetrachloroethane		5U	5U	5U	5U

Table F.1 (Continued)
Summary of Volatile Organic Compounds Detected in Soil QA/QC Samples
216 EIS and 234th CCSQ, Hayward CCSQ, Hayward ANG, Hayward, California

VOC	Location: Sample Date: Lab Sample No.:		04-004BH 1.5' Dup 07/28/94 941849-0011		04-004BH 7' MS 07/28/94 941849-0014		04-004BH 7' MSD 07/28/94 941849-0015		04-004BH 11.5' Dup 07/28/94 941849-0017	
	Matrix:		Soil		Soil		Soil		Soil	
Tetrachloroethane			5U		5U		5U		5U	
1,1,1-Trichloroethane			5U		5U		5U		5U	
1,1,2-Trichloroethane			5U		5U		5U		5U	
Trichloroethane			5U		58		61		5U	
Toluene			5U		59		61		5U	
Vinyl acetate			10U		10U		10U		10U	
Vinyl chloride			10U		10U		10U		10U	
Total Xylenes			5U		5U		5U		5U	

Table F.1 (Continued)
Summary of Volatile Organic Compounds Detected in Soil QA/QC Samples
216 EIS and 234th CCSQ, Hayward ANG, Hayward, California

VOC	Location:		FB-1		EB-2		Trip Blank		Trip Blank		Trip Blank	
	Sample Date:	Lab Sample No.:	07/28/94	941849-0018	07/28/94	941849-0019	07/22/94	941849-0020	07/22/94	941849-0021	08/12/94	941996-0003
		Matrix:	Water		Water		Water		Water		Water	
Acetone			13		10U		10U		10U		10U	
Benzene			5U		5U		5U		5U		5U	
Bromodichloromethane			5U		5U		5U		5U		5U	
Bromoform			5U		5U		5U		5U		5U	
Bromomethane			10U		10U		10U		10U		10U	
2-Butanone			10U		10U		10U		10U		10U	
Carbon disulfide			5U		5U		5U		5U		5U	
Carbon tetrachloride			5U		5U		5U		5U		5U	
Chlorobenzene			5U		5U		5U		5U		5U	
Chlorodibromomethane			5U		5U		5U		5U		5U	
Chloroethane			10U		10U		10U		10U		10U	
2-Chloroethylvinyl ether			10U		10U		10U		10U		10U	
Chloroform			5U		5U		5U		5U		5U	
Chloromethane			10U		10U		10U		10U		10U	
1,1-Dichloroethane			5U		5U		5U		5U		5U	
1,2-Dichloroethane			5U		5U		5U		5U		5U	
1,1-Dichloroethene			5U		5U		5U		5U		5U	
Total 1,2-Dichloroethenes			5U		5U		5U		5U		5U	
1,2-Dichloropropane			5U		5U		5U		5U		5U	
cis-1,3-Dichloropropene			5U		5U		5U		5U		5U	
trans-1,3-Dichloropropene			5U		5U		5U		5U		5U	
Ethylbenzene			5U		5U		5U		5U		5U	
2-Hexanone			5U		5U		5U		5U		5U	
Methylene Chloride			10U		10U		10U		10U		10U	
4-Methyl-2-pentanone			5U		5U		5U		5U		5U	
Styrene			10U		10U		10U		10U		10U	
1,1,2,2-Tetrachloroethane			5U		5U		5U		5U		5U	

Table F.1 (Concluded)
Summary of Volatile Organic Compounds Detected in Soil QA/QC Samples
216 EIS and 234th CCSQ, Hayward ANG, Hayward, California

VOC	Location: Sample Date: Lab Sample No.:	FB-1	EB-2	Trip Blank	Trip Blank	Trip Blank
		07/28/94 941849-0018	07/28/94 941849-0019	07/22/94 941849-0020	07/22/94 941849-0021	08/12/94 941996-0003
	Matrix:	Water	Water	Water	Water	Water
Tetrachloroethane		5U	5U	5U	5U	5U
1,1,1-Trichloroethane		5U	5U	5U	5U	5U
1,1,2-Trichloroethane		5U	5U	5U	5U	5U
Trichloroethane		5U	5U	5U	5U	5U
Toluene		5U	5U	5U	5U	5U
Vinyl acetate		10U	10U	10U	10U	10U
Vinyl chloride		10U	10U	10U	10U	10U
Total Xylenes		5U	5U	5U	5U	5U

VOC - Volatile Organic Compounds.

U - Compound analyzed for but not detected.

Number indicates the detection limit.

BH - Borehole.

Dup - Duplicate.

FB - Field Blank.

EB - Equipment Blank.

MS - Matrix Spike.

MSD - Matrix Spike Duplicate.

Table F.2

**Summary of TPH Compounds Detected in Soil QA/QC Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California**

Location: Sample Date: Lab Sample No.:	04-004BH 1.5' Dup 07/28/94 941849-0011	04-004BH 7' MS 07/28/94 941849-0014	04-004BH 7' MSD 07/28/94 941849-0015	04-004BH 11.5' Dup 07/28/94 941849-0017	FB-1 07/28/94 941849-0018	EB-2 07/28/94 941849-0019
TPH Matrix:	Soil	Soil	Soil	Soil	Water	Water
Diesel (mg/kg)	10U	510	520	10U	10U	10U
Gasoline ($\mu\text{g/kg}$)	500U	1,000	1,000	500U	100U	100U

U - Compound analyzed for but not detected.

Number indicates the detection limit.

TPH - Total Petroleum Hydrocarbons.

BH - Borehole.

Dup - Duplicate.

FB - Field Blank.

EB - Equipment Blank.

MS - Matrix Spike.

MSD - Matrix Spike Duplicate.

mg/kg - milligrams per kilogram.

 $\mu\text{g/kg}$ - micrograms per kilogram.

Table F.3

**Summary of Lead Detected in Soil QA/QC Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California**

(Results in milligrams per kilogram for soil or milligrams per liter for water.)

Location: Sample Date: Lab Sample No.:	04-004BH 1.5' Dup 07/28/94 941849-0011	04-004BH 7' MS 07/28/94 941849-0012	04-004BH 7' MSD 07/28/94 941849-0015	04-004BH 11.5' Dup 07/28/94 941849-0017	FB-1 07/28/94 941849-0018	EB-2 07/28/94 941849-0019
Metal Matrix:	Soil	Soil	Soil	Soil	Water	Water
Lead	20	98	90	5U	0.005U	0.005U

U - Compound analyzed for but not detected.

Number indicates the detection limit.

Dup - Duplicate.

BH - Borehole.

FB - Field Blank.

EB - Equipment Blank.

MS - Matrix Spike.

MSD - Matrix Spike Duplicate.

Table F.4
Summary of Volatile Organic Compounds Detected in Water QA/QC Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

Location: Sample Date: Lab Sample No.:	BG-001MW A Dup 08/10/94 941979-0004	FB-2 08/10/94 941979-0007	EB-2 08/10/94 941979-0008	Trip Blank 08/10/94 941979-0009	04-002MW Dup 12/07/94 943126-0004	FB 12/07/94 943126-0005	EB 12/07/94 943126-0006	Trip Blank 12/07/94 943126-0007
VOC	Matrix:	Water	Water	Water	Water	Water	Water	Water
Acetone		10U						
Benzene		5U	11	10U	50U	23	26	10U
Bromodichloromethane		5U	5U	5U	25U	5U	5U	5U
Bromoform		5U	5U	5U	25U	5U	5U	5U
Bromomethane		5U	5U	5U	25U	5U	5U	5U
2-Butanone		10U	10U	10U	50U	10U	10U	10U
Carbon disulfide		10U	14	10U	50U	18	18	10U
Carbon tetrachloride		5U	5U	5U	25U	5U	5U	5U
Chlorobenzene		5U	5U	5U	25U	5U	5U	5U
Chloroethane		10U	10U	10U	50U	10U	10U	10U
2-Chloroethylvinyl ether		10U	10U	10U	50U	10U	10U	10U
Chloroform		5U	5U	5U	25U	5U	5U	5U
Chloromethane		10U	10U	10U	50U	10U	10U	10U
Dibromochloromethane		5U	5U	5U	25U	5U	5U	5U
1,1-Dichloroethane		5U	5U	5U	25U	5U	5U	5U
1,2-Dichloroethane		5U	5U	5U	25U	5U	5U	5U
1,1-Dichloroethene		5U	5U	5U	25U	5U	5U	5U
Total 1,2-Dichloroethenes		5U	5U	5U	25U	5U	5U	5U
1,2-Dichloropropane		5U	5U	5U	25U	5U	5U	5U
cis-1,3-Dichloropropene		5U	5U	5U	25U	5U	5U	5U
trans-1,3-Dichloropropene		5U	5U	5U	25U	5U	5U	5U
Ethylbenzene		5U	5U	5U	25U	5U	5U	5U
2-Hexanone		10U	10U	10U	50U	10U	10U	10U
Methylene Chloride		5U	5U	5U	25U	5U	5U	5U
4-Methyl-2-pentanone		10U	10U	10U	50U	10U	10U	10U
Styrene		5U	5U	5U	25U	5U	5U	5U
1,1,2,2-Tetrachloroethane		5U	5U	5U	25U	5U	5U	5U

Table F.4 (Concluded)
Summary of Volatile Organic Compounds Detected in Water QA/QC Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

Location: Sample Date: Lab Sample No.:	BG-001MW A Dup 08/10/94 941979-0004	FB-2 08/10/94 941979-0007	EB-2 08/10/94 941979-0008	Trip Blank 08/10/94 941979-0009	04-002MW Dup 12/07/94 943126-0004	FB 12/07/94 943126-0005	EB 12/07/94 943126-0006	Trip Blank 12/07/94 943126-0007
VOC	Matrix:	Water	Water	Water	Water	Water	Water	Water
Tetrachloroethane		5U	5U	5U	25U	5U	5U	5U
Toluene		5U	5U	5U	25U	5U	5U	5U
1,1,1-Trichloroethane		5U	5U	5U	25U	5U	5U	5U
1,1,2-Trichloroethane		5U	5U	5U	25U	5U	5U	5U
Trichloroethane		5U	5U	5U	25U	5U	5U	5U
Vinyl acetate		10U	10U	10U	50U	10U	10U	10U
Vinyl chloride		10U	10U	10U	50U	10U	10U	10U
Total Xylenes		5U	5U	5U	25U	5U	5U	5U

U - Compound analyzed for but not detected.

Number indicates the detection limit.

VOC - Volatile Organic Compounds.

BG - Background.

MW - Monitoring Well.

Dup - Duplicate.

FB - Field Blank.

EB - Equipment Blank.

Table F.5
Summary of TPH Compounds Detected in Water QA/QC Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

Location: Sample Date: Lab Sample No.:	BG-001MW A Dup 08/10/94 941979-0004	FB-2 08/10/94 941979-0007	EB-2 08/10/94 941979-0008	04-002MW Dup 12/07/94 943126-0004	FB 12/07/94 943126-0005	EB 12/07/94 943126-0006	Trip Blank 12/07/94 943126-0007
TPH Matrix:	Water	Water	Water	Water	Water	Water	Water
Diesel (mg/L)	10U 100U	10U 100U	10U 100U	920 1,200	50U 100U	50U 100U	N/A 100U
Gasoline (µg/L)							

U - Compound analyzed for but not detected.
 Number indicates the detection limit.
 TPH - Total Petroleum Hydrocarbons.
 Dup - Duplicate.

MW - Monitoring Well.
 FB - Field Blank.
 mg/L - milligrams per liter.
 µg/L - micrograms per liter.

EB - Equipment Blank.
 N/A - Not Applicable.
 BG - Background.

Table F.6
Summary of Lead Detected in Water QA/QC Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in milligrams per liter)

Location: Sample Date: Lab Sample No.:	BG-001MW A Dup 08/10/94 941979-0004	FB-2 08/10/94 941979-0007	EB-2 08/10/94 941979-0008	04-002MW Dup 12/07/94 943126-0004	FB 12/07/94 943126-0005	EB 12/07/94 943126-0005
Metal Matrix:	Water	Water	Water	Water	Water	Water
Lead	6.7	1U	7.4	0.05U	0.005U	0.005U

U - Compound analyzed for but not detected.
 Number indicates the detection limit.
 BG - Background.

Dup -- Duplicate.
 FB -- Field Blank.

EB - Equipment Blank.
 MW - Monitoring Well.

Table F.7

**Summary of Volatile Organic Compounds Detected in QA/QC Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California**

(Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

VOC	Matrix:	05-001RBH 11.5' Dup 08/06/94 941953-0003		05-005RBH 11.5' - 13' Dup 08/05/94 941941-0007		05-005RBH 6.5' - 8' MS 08/05/94 941941-0003		05-005RBH 6.5' - 8' MSD 08/05/94 941941-0004		FB-1 08/05/94 941941-0008	
		Soil		Soil		Soil		Soil		Water	
Acetone		10U		10U		10U		27		10U	
Benzene		5U		5U		58		58		5U	
Bromodichloromethane		5U		5U		5U		5U		5U	
Bromoform		5U		5U		5U		5U		5U	
Bromomethane		10U		10U		10U		10U		10U	
2-Butanone		10U		10U		10U		10U		10U	
Carbon disulfide		5U		5U		5U		5U		5U	
Carbon tetrachloride		5U		5U		5U		5U		5U	
Chlorobenzene		5U		5U		54		55		5U	
Chlorodibromomethane		5U		5U		5U		5U		5U	
Chloroethane		10U		10U		10U		10U		10U	
2-Chloroethylvinyl ether		10U		10U		10U		10U		10U	
Chloroform		5U		5U		5U		5U		47	
Chloromethane		10U		10U		10U		10U		10U	
1,1-Dichloroethane		5U		5U		5U		5U		5U	
1,2-Dichloroethane		5U		5U		5U		5U		5U	
1,1-Dichloroethene		5U		5U		70		67		5U	
Total 1,2-Dichloroethenes		5U		5U		5U		5U		5U	
1,2-Dichloropropane		5U		5U		5U		5U		5U	
cis-1,3-Dichloropropene		5U		5U		5U		5U		5U	
trans-1,3-Dichloropropene		5U		5U		5U		5U		5U	
Ethylbenzene		5U		5U		5U		5U		5U	
2-Hexanone		10U		10U		10U		10U		10U	
Methylene Chloride		5U		5		5U		5U		12	
4-Methyl-2-pentanone		10U		10U		10U		10U		5U	
Styrene		5U		5U		5U		5U		5U	
1,1,2,2-Tetrachloroethane		5U		5U		5U		5U		5U	

Table F.7 (Continued)
Summary of Volatile Organic Compounds Detected in QA/QC Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

VOC	Location: Sample Date: Lab Sample No.:	05-001RBH 11.5' Dup 08/06/94 941953-0003	05-005RBH 11.5' - 13' Dup 08/05/94 941941-0007	05-005RBH 6.5' - 8' MS 08/05/94 941941-0003	05-005RBH 6.5' - 8' MSD 08/05/94 941941-0004	FB-1 08/05/94 941941-0008
		Soil	Soil	Soil	Soil	Water
Tetrachloroethene		5U	5U	5U	5U	5U
1,1,1-Trichloroethane		5U	5U	5U	5U	5U
1,1,2-Trichloroethane		5U	5U	5U	5U	5U
Trichloroethene		5U	5U	56	57	5U
Toluene		5U	5U	57	57	5U
Vinyl acetate		10U	10U	10U	10U	10U
Vinyl chloride		10U	10U	10U	10U	10U
Total Xylenes		5U	5U	5U	5U	5U

Table F.7 (Continued)
Summary of Volatile Organic Compounds Detected in QA/QC Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

Location: Sample Date: Lab Sample No.:	FB-2 08/06/94 941953-0015	EB-5 08/05/94 941941-0009	EB-6 08/06/94 941953-0014	Trip Blank 08/06/94 941953-0016	Trip Blank 08/05/94 941941-0010
VOC	Matrix:	Water	Water	Water	Water
Acetone		10U	11	10U	10U
Benzene		5U	5U	5U	5U
Bromodichloromethane		5U	5U	5U	5U
Bromoform		5U	5U	5U	5U
Bromomethane		10U	10U	10U	10U
2-Butanone		10U	14	10U	10U
Carbon disulfide		52	5U	5U	5U
Carbon tetrachloride		5U	5U	5U	5U
Chlorobenzene		5U	5U	5U	5U
Chlorodibromomethane		5U	5U	5U	5U
Chloroethane		10U	10U	10U	10U
2-Chloroethylvinyl ether		10U	10U	10U	10U
Chloroform		26	5U	5U	5U
Chloromethane		10U	10U	10U	10U
1,1-Dichloroethane		5U	5U	5U	5U
1,2-Dichloroethane		5U	5U	5U	5U
1,1-Dichloroethene		5U	5U	5U	5U
Total 1,2-Dichloroethenes		5U	5U	5U	5U
1,2-Dichloropropane		5U	5U	5U	5U
cis-1,3-Dichloropropene		5U	5U	5U	5U
trans-1,3-Dichloropropene		5U	5U	5U	5U
Ethylbenzene		5U	5U	5U	5U
2-Hexanone		10U	10U	10U	10U
Methylene Chloride		5U	5U	5U	5U
4-Methyl-2-pentanone		10U	10U	10U	10U
Styrene		5U	5U	5U	5U
1,1,2,2-Tetrachloroethane		5U	5U	5U	5U

Table F.7 (Concluded)
Summary of Volatile Organic Compounds Detected in QA/QC Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

VOC	Matrix:	FB-2	EB-5	EB-6	Trip Blank	Trip Blank
		08/06/94 941953-0015	08/05/94 941941-0009	08/06/94 941953-0014	08/06/94 941953-0016	08/05/94 941941-0010
		Water	Water	Water	Water	Water
Tetrachloroethene		5U	5U	5U	5U	5U
1,1,1-Trichloroethane		5U	5U	5U	5U	5U
1,1,2-Trichloroethane		5U	5U	5U	5U	5U
Trichloroethene		5U	5U	5U	5U	5U
Toluene		5U	5U	5U	5U	5U
Vinyl acetate		10U	10U	10U	10U	10U
Vinyl chloride		10U	10U	10U	10U	10U
Total Xylenes		5U	5U	5U	5U	5U

U - Compound analyzed for but not detected.
 Number indicates the detection limit.
 VOC - Volatile Organic Compounds.

Dup - Duplicate.
 RBH - Resampled Borehole.
 MS - Matrix Spike.

MSD - Matrix Spike Duplicate.
 FB - Field Blank.
 EB - Equipment Blank.

Table F.8
Summary of TPH Compounds Detected in QA/QC Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

Location: Sample Date: Lab Sample No.:	05-001RBH 11.5' Dup 08/06/94 941953-0003	05-005RBH 11.5' - 13' Dup 08/05/94 941941-0007	05-005RBH 6.5' - 8' MS 08/05/94 941941-0003	05-005RBH 6.5' - 8' MSD 08/05/94 941941-0004	FB-1 08/05/94 941941-0008
	TPH Matrix: Soil	Soil	Soil	Soil	Water
Location: Sample Date: Lab Sample No.:	10U 100U	10U 100U	470 840	480 1,000	10U 100U
	Diesel Gasoline				
Location: Sample Date: Lab Sample No.:	FB-2 08/06/94 941953-0015	EB-5 08/05/94 941941-0009	EB-6 08/06/94 941953-0014		
	Water	Water	Water		
TPH Matrix: Diesel Gasoline	10U 100U	10U 100U	620 100U		

U - Compound analyzed for but not detected.
 Number indicates the detection limit.
 Dup - Duplicate.

TPH - Total Petroleum Hydrocarbons.
 RBH - Resampled Borehole.
 MS - Matrix Spike.

MSD - Matrix Spike Duplicate.
 FB - Field Blank.
 EB - Equipment Blank.

Table F.9
Summary of Lead Detected in QA/QC Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

Location: Sample Date: Lab Sample No.:	05-001RBH 11.5' Dup 08/06/94 941953-0003	05-005RBH 11.5' - 13' Dup 08/05/94 941941-0007	05-005RBH 6.5' - 8' MS 08/05/94 941941-0003	05-005RBH 6.5' - 8' MSD 08/05/94 941941-0004	FB-1 08/05/94 941941-0008
Metal Matrix:	Soil	Soil	Soil	Soil	Water
Lead	5.0U	10U	100	97	0.100U
Location: Sample Date: Lab Sample No.:	FB-2 08/06/94 941953-0015	EB-5 08/05/94 941941-0009	EB-6 08/06/94 941953-0014		
Metal Matrix:	Water	Water	Water		
Lead	0.050U	0.100U	0.050U		

U - Compound analyzed for but not detected.
 Number indicates the detection limit.
 Dup - Duplicate.

RBH - Resampled Borehole.
 MS - Matrix Spike.
 MSD - Matrix Spike Duplicate.

FB - Field Blank.
 EB - Equipment Blank.

Table F.10

**Summary of Volatile Organic Compounds Detected in QA/QC Water Samples
216th EIS and 234th CCSQ, Hayward ANGS, Hayward, California**

(Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

Location: Sample Date: Lab Sample No.:	05-003MW A Dup 08/11/94 941987-0007	Trip Blank 08/12/94 941987-0006	Trip Blank 08/10/94 941966-0002	FB 08/09/94 941966-0004	EB 08/09/94 941966-0005
VOC	Matrix:	Water	Water	Water	Water
Acetone		10U	10U	10U	10U
Benzene		5U	5U	5U	5U
Bromodichloromethane		5U	5U	5U	5U
Bromoform		5U	5U	5U	5U
Bromomethane		10U	10U	10U	10U
2-Butanone		10U	10U	10U	10U
Carbon disulfide		5U	5U	5U	5U
Carbon tetrachloride		5U	5U	5U	5U
Chlorobenzene		5U	5U	5U	5U
Chloroethane		10U	10U	10U	10U
2-Chloroethylvinyl ether		10U	10U	10U	10U
Chloroform		5U	5U	5U	5U
Chloromethane		10U	10U	10U	10U
Dibromochloromethane		5U	5U	5U	5U
1,1-Dichloroethane		5U	5U	5U	5U
1,2-Dichloroethane		5U	5U	5U	5U
1,1-Dichloroethene		5U	5U	5U	5U
Total 1,2-Dichloroethenes		5U	5U	5U	5U
1,2-Dichloropropane		5U	5U	5U	5U
cis-1,3-Dichloropropene		5U	5U	5U	5U
trans-1,3-Dichloropropene		5U	5U	5U	5U
Ethylbenzene		5U	5U	5U	5U
2-Hexanone		10U	10U	10U	10U
Methylene Chloride		5U	5U	5U	5U
4-Methyl-2-pentanone		10U	10U	10U	10U
Styrene		5U	5U	5U	5U
1,1,2,2-Tetrachloroethane		5U	5U	5U	5U

Table F.10 (Continued)
Summary of Volatile Organic Compounds Detected in QA/QC Water Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

VOC	Matrix:	Location: Sample Date: Lab Sample No.:	05-003MW A Dup 08/11/94 941987-0007	Trip Blank 08/12/94 941987-0006	Trip Blank 08/10/94 941966-0002	FB 08/09/94 941966-0004	EB 08/09/94 941966-0005
			Water	Water	Water	Water	Water
Tetrachloroethene			5U	5U	5U	5U	5U
Toluene			5U	5U	5U	5U	5U
1,1,1-Trichloroethane			5U	5U	5U	5U	5U
1,1,2-Trichloroethane			5U	5U	5U	5U	5U
Trichloroethene			5U	5U	5U	5U	5U
Vinyl acetate			10U	10U	10U	10U	10U
Vinyl chloride			10U	10U	10U	10U	10U
Total Xylenes			5U	5U	5U	5U	5U

Table F.10 (Continued)
Summary of Volatile Organic Compounds Detected in QA/QC Water Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

VOC	Location: Sample Date: Lab Sample No.:	Trip Blank 12/08/94 943126-0011		Trip Blank 12/07/94 943126-0007		EB 12/07/94 943126-0006		FB 12/07/94 943126-0005	
		Water		Water		Water		Water	
Acetone		10U		10U		26		23	
Benzene		5U		5U		5U		5U	
Bromodichloromethane		5U		5U		5U		5U	
Bromoform		5U		5U		5U		5U	
Bromomethane		10U		10U		10U		10U	
2-Butanone		10U		10U		18		18	
Carbon disulfide		5U		5U		5U		5U	
Carbon tetrachloride		5U		5U		5U		5U	
Chlorobenzene		5U		5U		5U		5U	
Chloroethane		10U		10U		10U		10U	
2-Chloroethylvinyl ether		10U		10U		10U		10U	
Chloroform		5U		5U		5U		5U	
Chloromethane		10U		10U		10U		10U	
Dibromochloromethane		5U		5U		5U		5U	
1,1-Dichloroethane		5U		5U		5U		5U	
1,2-Dichloroethane		5U		5U		5U		5U	
1,1-Dichloroethene		5U		5U		5U		5U	
Total 1,2-Dichloroethenes		5U		5U		5U		5U	
1,2-Dichloropropane		5U		5U		5U		5U	
cis-1,3-Dichloropropene		5U		5U		5U		5U	
trans-1,3-Dichloropropene		5U		5U		5U		5U	
Ethylbenzene		5U		5U		5U		5U	
2-Hexanone		10U		10U		10U		10U	
Methylene Chloride		5U		5U		5U		5U	
4-Methyl-2-pentanone		10U		10U		10U		10U	
Styrene		5U		5U		5U		5U	
1,1,2,2-Tetrachloroethane		5U		5U		5U		5U	

Table F.10 (Concluded)
Summary of Volatile Organic Compounds Detected in QA/QC Water Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

Location: Sample Date: Lab Sample No.:	Trip Blank 12/08/94 943126-0011	Trip Blank 12/07/94 943126-0007	EB 12/07/94 943126-0006	FB 12/07/94 943126-0005
VOC	Matrix:	Water	Water	Water
Tetrachloroethene		5U	5U	5U
Toluene		5U	5U	5U
1,1,1-Trichloroethane		5U	5U	5U
1,1,2-Trichloroethane		5U	5U	5U
Trichloroethene		5U	5U	5U
Vinyl acetate		10U	10U	10U
Vinyl chloride		10U	10U	10U
Total Xylenes		5U	5U	5U

U -- Compound analyzed for but not detected. Number indicates the detection limit.

Dup -- Duplicate. EB -- Equipment Blank.
 MW -- Monitoring Well. VOC -- Volatile Organic Compound.
 FB -- Field Blank.

Table F.11

**Summary of TPH Compounds Detected in QA/QC Water Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California**
(Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

Location: Sample Date: Lab Sample No.:	05-003MW A Dup 08/11/94 941987-0007	FB 08/09/94 941966-0004	EB 08/09/94 941966-0005	Trip Blank 12/08/94 943126-0011	Trip Blank 12/07/94 943126-0007	EB 12/07/94 943126-0006	FB 12/07/94 943126-0005
TPH Matrix:	Water	Water	Water	Water	Water	Water	Water
Diesel	10U	10U	10U	NA	NA	50U	50U
Gasoline	100U	100U	100U	100U	100U	100U	100U

U - Compound analyzed for but not detected. Number indicates the detection limit.

Dup - Duplicate.

TPH - Total Petroleum Hydrocarbons.

MW - Monitoring Well.

NA - Not Applicable.

FB - Field Blank.

EB - Equipment Blank.

Table F.12

**Summary of Lead Detected in QA/QC Water Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California**
(Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

Location: Sample Date: Lab Sample No.:	05-003MW A Dup 08/11/94 941987-0007	FB 08/09/94 941966-0004	EB 08/09/94 941966-0005	Trip Blank 12/08/94 943126-0011	Trip Blank 12/07/94 943126-0007	EB 12/07/94 943126-0006	FB 12/07/94 943126-0005
Metal Matrix:	Water	Water	Water	Water	Water	Water	Water
Lead	1.0U	1.0U	1.0U	NA	NA	0.005U	0.005U

U - Compound analyzed for but not detected. Number indicates the detection limit.

Dup - Duplicate.

MW - Monitoring Well.

NA - Not Applicable.

FB - Field Blank.

EB - Equipment Blank.

S

OPERATIONAL TECHNOLOGIES CORPORATION

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Hayward Air National Guard Site Investigation
Hayward, California 1315-115-S002
Core Laboratories Inc., Anaheim, California
Data Validation Brief Summary

SAMPLE:

SOIL

BG-001BH 1.5'

Lab ID# 941996-0001

VOA/SW8240 =

**Hit on Carbon Disulfide at 8 ug/kg with a detection limit of 5 ug/kg.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
Blanks were clean and no compounds were detected above the detection limits.

TPH/SW8015-Gas=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 100 ug/kg.
Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 10 mg/kg.
Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

**Total lead was not detected above detection limit of 10 mg/kg.
*Met 6 month holding times.
COC information verified.

SAMPLE:

SOIL

BG-001BH 9'

Lab ID# 941996-0002

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
Blanks were clean and no compounds were detected above the detection limits.

TPH/SW8015-Gas=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 100 ug/kg.
Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 10 mg/kg.
Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

**Total lead was not detected above detection limit of 10 mg/kg.
*Met 6 month holding times.
COC information verified.

SAMPLE:

WATER

BG-001MW A

Lab ID# 941979-0003

VOA/SW8240 =

**Hit was detected on 4-Methyl-2-Pentanone at 12.38 ug/l with a detection limit of 10 ug/l. This was not noted on the Report Form but was on the Quant report. This needs to be corrected. (Hit was not confirmed by mass spectra. Reporting result is valid.)*

**Met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 100 ug/l.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/l.*

**Blanks were clean of any hits above the detection limits.*

**Total Lead
SW6010=**

**Total lead was not detected above detection limit of 1 mg/l.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

WATER

BG-001MW A

Lab ID# 941979-0004

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*Met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
Blanks were clean and no compounds were detected above the detection limits.

TPH/SW8015-Gas=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 100 ug/l.
Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 10 mg/l.
Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

**Total lead was not detected above detection limit of 1 mg/l.
*Met 6 month holding times.
COC information verified.

SAMPLE:

WATER

BG-001MW B

Lab ID# 941979-0006

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*Met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
Blanks were clean and no compounds were detected above the detection limits.

TPH/SW8015-Gas=

**Met 28 day holding time.
*COC information verified.
*Hit was detected at 250 ug/l with the detection limit of 100 ug/l.
Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 10 mg/l.
Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

**Total lead was not detected above detection limit of 1 mg/l.
*Met 6 month holding times.
COC information verified.

SAMPLE:

WATER

04-001MW A

Lab ID# 941979-0001

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*Met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
Blanks were clean and no compounds were detected above the detection limits.

TPH/SW8015-Gas=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 100 ug/l.
Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 10 mg/l.
Blanks were clean of any hits above the detection limits.

Total Lead

SW6010=

**Total lead was not detected above detection limit of 1 mg/l.
*Met 6 month holding times.
COC information verified.

SAMPLE:

WATER

04-001MW B

Lab ID# 941987-0001

VOA/SW8240 =

**A hit was detected above the detection limit for Total Xylene at 7.74 ug/l with a detection limit of 5 ug/l. This was not reported on the Report Form and needs to be corrected. (Individual xylenes were BDL. Reporting results are valid.)*

**All met 7 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**Hit was detected at 530 ug/l with a detection limit of 100 ug/l.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/l.*

**Blanks were clean of any hits above the detection limits.*

Total Lead
SW6010=

**Total lead was not detected above detection limit of 1 mg/l.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

WATER

04-002MW A

Lab ID# 941979-0005

VOA/SW8240 =

**Hits were detected on Acetone at 30.03 ug/l, 4-Methyl-2-Pentanone at 12.36 ug/l, 2-Butanone at 132.49 ug/l, and 2-Hexanone at 32.88 ug/l with detection limits at 10 ug/l. Hits were also detected on 1,1,2-Trichloroethane at 6.63 ug/l and Total Xylene at 8.61 ug/l with detection limits at 5 ug/l. These hits were not reported on the Report Form but are detected on the Quant Report. This needs corrected. (Hit was not confirmed by mass spectra. Reporting result is valid.)*

**Met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**Hit was detected at 1000 ug/l with a detection limit of 100 ug/l.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/l.*

**Blanks were clean of any hits above the detection limits.*

Total Lead
SW6010=

**Total lead was detected at 8.3 mg/l with a detection limit of 1 mg/l.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

WATER

04-002MW B

Lab ID# 941979-0002

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*Met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
Blanks were clean and no compounds were detected above the detection limits.

TPH/SW8015-Gas=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 100 ug/l.
Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 10 mg/l.
Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

**Total lead was not detected above detection limit of 1 mg/l.
*Met 6 month holding times.
COC information verified.

SAMPLE:

SOIL

04-001BH 1'

Lab ID# 941849-0004

VOA/SW8240 =

*No hits were detected above the assigned detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Blanks were clean and no compounds were detected above the detection limits.
*Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample? (Sample results remain valid.)

TPH/SW8015-Gas=

*Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 500 ug/kg.
*Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

*Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 10 mg/kg.
*Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

*Total lead was detected at 210 mg/kg above the detection limit of 5 mg/kg.
*Met 6 month holding times.
*COC information verified.

SAMPLE:

SOIL

04-001BH 11'

Lab ID# 941849-0005

VOA/SW8240 =

- *Acetone was detected at 14 ug/kg with a detection limit of 10 ug/kg.
- *All met 14 day holding time.
- *COC information verified.
- *All surrogate recoveries were within QC limits.
- *Blanks were clean and no compounds were detected above the detection limits.
- *Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample? (Sample results remain valid.)

TPH/SW8015-Gas=

- *Met 28 day holding time.
- *COC information verified.
- *No hit was detected above the detection limit of 500 ug/kg.
- *Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

- *Met 28 day holding time.
- *COC information verified.
- *No hit was detected above the detection limit of 10 mg/kg.
- *Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

- *Total lead was detected at 7.3 mg/kg above the detection limit of 5 mg/kg.
- *Met 6 month holding times.
- *COC information verified.

SAMPLE:

SOIL

04-001BH 21'

Lab ID# 941849-0006

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Blanks were clean and no compounds were detected above the detection limits.
Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample? (Sample results remain valid.)

TPH/SW8015-Gas=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 500 ug/kg.
Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 10 mg/kg.
Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

**Total lead was detected at 8.3 mg/kg above the detection limit of 5 mg/kg.
*Met 6 month holding times.
COC information verified.

SAMPLE:

SOIL

04-002BH 1'

Lab ID# 941849-0001

VOA/SW8240 =

*No hits were detected above the assigned detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Blanks were clean and no compounds were detected above the detection limits.
*Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample? (Sample results remain valid.)

TPH/SW8015-Gas=

*Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 500 ug/kg.
*Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

*Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 10 mg/kg.
*Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

*Total lead was detected at 11 mg/kg above the detection limit of 5 mg/kg.
*Met 6 month holding times.
*COC information verified.

SAMPLE:

SOIL

04-002BH 6'

Lab ID# 941849-0002

VOA/SW8240 =

**No hits were detected above the assigned detection limits.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

**Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample? (Sample results remain valid.)*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 500 ug/kg.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/kg.*

**Blanks were clean of any hits above the detection limits.*

Total Lead
SW6010=

**Total lead was detected at 10 mg/kg above the detection limit of 5 mg/kg.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

SOIL

04-002BH 11'

Lab ID# 941849-0003

VOA/SW8240 =

*No hits were detected above the assigned detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Blanks were clean and no compounds were detected above the detection limits.
*Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample? (Sample results remain valid.)

TPH/SW8015-Gas=

*Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 500 ug/kg.
*Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

*Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 10 mg/kg.
*Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

*Total lead was not detected above the detection limit of 5 mg/kg.
*Met 6 month holding times.
*COC information verified.

SAMPLE:

SOIL

04-003BH 1'

Lab ID# 941849-0007

VOA/SW8240 =

**Methylene Chloride was detected at 6 ug/kg with a detection limit of 5 ug/kg.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

**Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample? (Sample results remain valid.)*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 500 ug/kg.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/kg.*

**Blanks were clean of any hits above the detection limits.*

Total Lead
SW6010=

**Total lead was detected at 59 mg/kg above the detection limit of 5 mg/kg.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

SOIL

04-003BH 6'

Lab ID# 941849-0008

VOA/SW8240 =

**Methylene Chloride was detected at 6 ug/kg with a detection limit of 5 ug/kg.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

**Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample? (Sample results remain valid.)*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 500 ug/kg.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Liesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/kg.*

**Blanks were clean of any hits above the detection limits.*

Total Lead
SW6010=

**Total lead was detected at 11 mg/kg above the detection limit of 5 mg/kg.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

SOIL

04-003BH 11'

Lab ID# 941849-0009

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Blanks were clean and no compounds were detected above the detection limits.
Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample? (Sample results remain valid.)

TPH/SW8015-Gas=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 500 ug/kg.
Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 10 mg/kg.
Blanks were clean of any hits above the detection limits.

**Total Lead
SW6010=**

**Total lead was detected at 8.6 mg/kg above the detection limit of 5 mg/kg.
*Met 6 month holding times.
COC information verified.

SAMPLE:

SOIL

04-004BH 1.5'

Lab ID# 941849-0010

VOA/SW8240 =

**Methylene Chloride was detected at 5 ug/kg with a detection limit of 5 ug/kg.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

**Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample? (Sample results remain valid.)*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 500 ug/kg.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/kg.*

**Blanks were clean of any hits above the detection limits.*

Total Lead
SW6010=

**Total lead was detected at 590 mg/kg above the detection limit of 5 mg/kg.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

SOIL

04-004BH 1.5' DUP

Lab ID# 941849-0011

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Blanks were clean and no compounds were detected above the detection limits.
Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample? (Sample results remain valid.)

TPH/SW8015-Gas=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 500 ug/kg.
Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 10 mg/kg.
Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

**Total lead was detected at 20 mg/kg above the detection limit of 5 mg/kg.
*Met 6 month holding times.
COC information verified.

SAMPLE:

SOIL

04-004BH 6'

Lab ID# 941849-0012

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Blanks were clean and no compounds were detected above the detection limits.
Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample. (Sample results remain valid.)

TPH/SW8015-Gas=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 500 ug/kg.
Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 10 mg/kg.
Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

**Total lead was detected at 15 mg/kg above the detection limit of 5 mg/kg.
*Met 6 month holding times.
COC information verified.

SAMPLE:

SOIL

04-004BH 7'

Lab ID# 941849-0013

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Blanks were clean and no compounds were detected above the detection limits.
Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample? (Sample results remain valid.)

TPH/SW8015-Gas=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 500 ug/kg.
Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 10 mg/kg.
Blanks were clean of any hits above the detection limits.

**Total Lead
SW6010=**

**Total lead was detected at 14 mg/kg above the detection limit of 5 mg/kg.
*Met 6 month holding times.
COC information verified.

SAMPLE:

SOIL

04-004BH 7' MS

Lab ID# 941849-0014

VOA/SW8240 =

**All spiked compounds were detected within QC Range.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

**Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample? (Sample results remain valid.)*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**All spiked compounds were detected within QC Range.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**All spiked compounds were detected within QC Range.*

**Blanks were clean of any hits above the detection limits.*

Total Lead
SW6010=

**Spiked Total lead was detected at 98 mg/kg.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

SOIL

04-004BH 7' MSD

Lab ID# 941849-0015

VOA/SW8240 =

**All spiked compounds were detected within QC Range. All RPD's were within QC Range.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

**Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample? (Sample results remain valid.)*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**All spiked compounds were detected within QC Range. All RPD's were within QC Range.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**All spiked compounds were detected within QC Range. All spiked compounds were within QC Range.*

**Blanks were clean of any hits above the detection limits.*

**Total Lead
SW6010=**

**Spiked Total lead was detected at 90 mg/kg. RPD was within QC Range.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

SOIL

04-004BH 11.5'

Lab ID# 941849-0016

VOA/SW8240 =

**Methylene Chloride was detected at 6 ug/kg with a detection limit of 5 ug/kg.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

**Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample? (Sample results remain valid.)*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 500 ug/kg.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/kg.*

**Blanks were clean of any hits above the detection limits.*

Total Lead
SW6010=

**Total lead was not detected above the detection limit of 5 mg/kg.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

SOIL

04-004BH 11.5' DUP

Lab ID# 941849-0017

VOA/SW8240 =

**Methylene Chloride was detected at 5 ug/kg with a detection limit of 5 ug/kg.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

**Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample? (Sample results remain valid.)*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 500 ug/kg.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/kg.*

**Blanks were clean of any hits above the detection limits.*

Total Lead

SW6010=

**Total lead was not detected above the detection limit of 5 mg/kg.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

WATER

EB-1

Lab ID# 941849-0018

VOA/SW8240 =

- *Acetone was detected at 13 ug/l with a detection limit of 10 ug/l.*
- *All met 14 day holding time.*
- *COC information verified.*
- *All surrogate recoveries were within QC limits.*
- *Blanks were clean and no compounds were detected above the detection limits.*

TPH/SW8015-Gas=

- *Met 28 day holding time.*
- *COC information verified.*
- *No hit was detected above the detection limit of 100 ug/kg.*
- *Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

- *Met 28 day holding time.*
- *COC information verified.*
- *No hit was detected above the detection limit of 10 mg/l.*
- *Blanks were clean of any hits above the detection limits.*

Total Lead
SW6010=

- *Total lead was not detected above the detection limit of .005 mg/l.*
- *Met 6 month holding times.*
- *COC information verified.*

SAMPLE:

WATER

FB-2

Lab ID# 941953-0015

VOA/SW8240 =

**Hit on Carbon Disulfide at 52 ug/l and Chloroform at 26 ug/l with detection limits of 5 ug/l.*

**All met 7 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 100 ug/l.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/kg.*

**Blanks were clean of any hits above the detection limits.*

Total Lead

SW6010=

**Total lead was not detected above the detection limit of 0.050 mg/l.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

WATER

FIELD BLANK

Lab ID# 941966-0004

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*Met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
Blanks were clean and no compounds were detected above the detection limits.

TPH/SW8015-Gas=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 100 ug/l.
Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 10 mg/l.
Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

**Total lead was not detected above the detection limit of 1 mg/l.
*Met 6 month holding times.
COC information verified.

SAMPLE:

WATER

TRIP BLANK

Lab ID# 941996-0003

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
Blanks were clean and no compounds were detected above the detection limits.

SAMPLE:

WATER

TRIP BLANK

Lab ID# 941987-0006

VOA/SW8240 =

**A hit was detected above the detection limit for Acetone at 17.38 with a detection limit of 10 ug/l. This was not reported on the Report Form and needs to be corrected. (Hit was not confirmed by mass spectra. Reporting result is valid.)
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
Blanks were clean and no compounds were detected above the detection limits.

SAMPLE:

WATER

TRIP BLANK

Lab ID# 941953-0016

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
Blanks were clean and no compounds were detected above the detection limits.

SAMPLE:

WATER

TRIP BLANK

Lab ID# 941979-0009

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
Blanks were clean and no compounds were detected above the detection limits.

SAMPLE:

WATER

05-001 MW A

Lab ID# 941966-0001

VOA/SW8240 =

**No hits were detected above the assigned detection limits.*

**Did not meet 7 day holding time, expired over one day.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**Hit was detected at 550 ug/l with a detection limit of 100 ug/l.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/l.*

**Blanks were clean of any hits above the detection limits.*

Total Lead
SW6010=

**Total lead was not detected above the detection limit of .005 mg/l.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

WATER

05-001 MW B

Lab ID# 941966-0003

VOA/SW8240 =

**No hits were detected above the assigned detection limits.*

**Did not meet 7 day holding time, expired over one day.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**Hit was detected at 160 ug/l with a detection limit of 100 ug/l.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/l.*

**Blanks were clean of any hits above the detection limits.*

Total Lead

SW6010=

**Total lead was not detected above the detection limit of .005 mg/l.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

WATER

05-002MW A

Lab ID# 941987-0004

VOA/SW8240 =

*A hits were detected above the detection limit for 4-Methyl-2-Pentanone at 17.43 ug/l and 2-Hexanone at 31.37 ug/l with detection limits of 10 ug/l. Also, a hit was detected above the detection limit for 1,1,2-Trichloroethane at 20.97 ug/l with a detection limit of 5 ug/l. These were not reported on the Report Form and need to be corrected.

*All met 7 day holding time.

*COC information verified.

*All surrogate recoveries were within QC limits.

*Blanks were clean and no compounds were detected above the detection limits.

TPH/SW8015-Gas=

*Met 28 day holding time.

*COC information verified.

*Hit was detected at 1200 ug/l with a detection limit of 100 ug/l.

*Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

*Met 28 day holding time.

*COC information verified.

*No hit was detected above the detection limit of 10 mg/l.

*Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

*Total lead was not detected above detection limit of 1 mg/l.

*Met 6 month holding times.

*COC information verified.

SAMPLE:

WATER

05-002MW B

Lab ID# 941987-0005

VOA/SW8240 =

*A hits were detected above the detection limit for 4-Methyl-2-Pentanone at 11.97 ug/l, 2-Hexanone at 17.38 ug/l, and Acetone at 67.31 with detection limits of 10 ug/l. Also, a hit was detected above the detection limit for 1,1,2-Trichloroethane at 14.12 ug/l with a detection limit of 5 ug/l. These were not reported on the Report Form and need to be corrected.

*All met 7 day holding time.

*COC information verified.

*All surrogate recoveries were within QC limits.

*Blanks were clean and no compounds were detected above the detection limits.

TPH/SW8015-Gas=

*Met 28 day holding time.

*COC information verified.

*Hit was detected at 1100 ug/l with a detection limit of 100 ug/l.

*Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

*Met 28 day holding time.

*COC information verified.

*No hit was detected above the detection limit of 10 mg/l.

*Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

*Total lead was not detected above detection limit of 1 mg/l.

*Met 6 month holding times.

*COC information verified.

SAMPLE:

WATER

05-003MW A

Lab ID# 941987-0002

VOA/SW8240 =

*A hit was detected above the detection limit for 2-Hexanone at 35.35 ug/l with a detection limit of 10 ug/l. This was not reported on the Report Form and needs to be corrected.

*All met 7 day holding time.

*COC information verified.

*All surrogate recoveries were within QC limits.

*Blanks were clean and no compounds were detected above the detection limits.

TPH/SW8015-Gas=

*Met 28 day holding time.

*COC information verified.

*No hit was detected above the detection limit of 100 ug/l.

*Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

*Met 28 day holding time.

*COC information verified.

*No hit was detected above the detection limit of 10 mg/l.

*Blanks were clean of any hits above the detection limits.

Total Lead

SW6010=

*Total lead was not detected above detection limit of 1 mg/l.

*Met 6 month holding times.

*COC information verified.

SAMPLE:

WATER

05-003MW A DupLab ID# 941987-0007

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*All met 7 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
Blanks were clean and no compounds were detected above the detection limits.

TPH/SW8015-Gas=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 100 ug/l.
Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 10 mg/l.
Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

**Total lead was not detected above detection limit of 1 mg/l.
*Met 6 month holding times.
COC information verified.

SAMPLE:

WATER

05-003MW B

Lab ID# 941987-0003

VOA/SW8240 =

**A hit was detected above the detection limit for 4-Methyl-2-Pentanone at 28.79 ug/l with a detection limit of 10 ug/l. This was not reported on the Report Form and needs to be corrected.*

**All met 7 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 100 ug/l.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/l.*

**Blanks were clean of any hits above the detection limits.*

Total Lead
SW6010=

**Total lead was not detected above detection limit of 1 mg/l.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

SOIL

05-001R-BH 1.5' Lab ID# 941953-0001

VOA/SW8240 =

*Hit was detected on Acetone at 31.17 ug/kg but was not reported on the Report Form and needs to be corrected.

*All met 14 day holding time.

*COC information verified.

*All surrogate recoveries were within QC limits.

*Blanks were clean and no compounds were detected above the detection limits.

*Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?

TPH/SW8015-Gas=

*Met 28 day holding time.

*COC information verified.

*No hit was detected above the detection limit of 100 ug/kg.

*Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

*Met 28 day holding time.

*COC information verified.

*No hit was detected above the detection limit of 10 mg/kg.

*Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

*Total lead was detected at 16 mg/kg with a detection limit of 5 mg/kg.

*Met 6 month holding times.

*COC information verified.

SAMPLE:

SOIL

05-001R-BH 11.5'

Lab ID# 941953-0002

VOA/SW8240 =

**No hit was detected above the assigned detection limits.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

**Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 100 ug/kg.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/kg.*

**Blanks were clean of any hits above the detection limits.*

Total Lead
SW6010=

**Total lead was not detected above the detection limit of 5 mg/kg.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

SOIL

05-001R-BH 11.5' DUP

Lab ID# 941953-0003

VOA/SW8240 =

**No hit was detected above the assigned detection limits.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

**Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 100 ug/kg.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/kg.*

**Blanks were clean of any hits above the detection limits.*

Total Lead

SW6010=

**Total lead was not detected above the detection limit of 5 mg/kg.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

SOIL

05-001R-BH 14'-15.5'

Lab ID# 941953-0004

VOA/SW8240 =

*Hits were detected on Acetone at 23.72 ug/kg and 4-Methyl-2-Pentanone at 16.78 ug/kg with the detection limits of 10 ug/kg. These hits were reported on the Quant Report but not on the Report Form. This needs to be corrected.

*All met 14 day holding time.

*COC information verified.

*All surrogate recoveries were within QC limits.

*Blanks were clean and no compounds were detected above the detection limits.

*Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?

TPH/SW8015-Gas=

*Met 28 day holding time.

*COC information verified.

*No hit was detected above the detection limit of 100 ug/kg.

*Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

*Met 28 day holding time.

*COC information verified.

*No hit was detected above the detection limit of 10 mg/kg.

*Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

*Total lead was not detected above the detection limit of 5 mg/kg.

*Met 6 month holding times.

*COC information verified.

SAMPLE:

SOIL

05-002R-BH 2'

Lab ID# 941953-0005

VOA/SW8240 =

**Hit on Ethylbenzene at 6 ug/kg with a detection limit of 5 ug/kg. A hit on Total Xylenes was at 11.32 ug/kg with a detection limit of 5 ug/kg. These Xylene hits were reported on the Quant Report but not on the Report Form. This needs to be corrected.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

**Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**Hit was detected at 2200 ug/kg with the detection limit of 500 ug/kg.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/kg.*

**Blanks were clean of any hits above the detection limits.*

Total Lead

SW6010=

**Total lead was not detected above the detection limit of 5 mg/kg.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

SOIL

05-002R-BH 11' Lab ID# 941953-0006

VOA/SW8240 =

**Hits on Acetone at 59 ug/kg with a detection limit of 50 ug/kg and Carbon Disulfide at 30 ug/kg with a detection limit of 25 ug/kg. A dilution of 5x was performed on this analysis.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

**Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**Hit was detected at 1100 ug/kg with the detection limit of 500 ug/kg.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/kg.*

**Blanks were clean of any hits above the detection limits.*

Total Lead

SW6010=

**Total lead was not detected above the detection limit of 5 mg/kg.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

SOIL

05-002R-BH 15' Lab ID# 941953-0007

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Blanks were clean and no compounds were detected above the detection limits.
Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?

TPH/SW8015-Gas=

**Met 28 day holding time.
*COC information verified.
*Hit was detected at 260 ug/kg with the detection limit of 100 ug/kg. The Report Form shows ND with a detection limit of 500 ug/kg. This needs to be corrected.
Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 10 mg/kg.
Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

**Total lead was not detected above the detection limit of 5 mg/kg.
*Met 6 month holding times.
COC information verified.

SAMPLE:

SOIL

05-003R-BH 1.5' Lab ID# 941953-0008

VOA/SW8240 =

**Hit on Carbon Disulfide at 6 ug/kg with a detection limit of 5 ug/kg. Acetone was detected at 42.77 ug/kg, 2-Butanone detected at 143.66 ug/kg, and 4-Methyl-2-Pentanone detected at 24.18 ug/kg with detection limits of 10 ug/kg. These were not stated on the Report Form but were detected on the Quant report. These need corrections.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

**Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 100 ug/kg.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/kg.*

**Blanks were clean of any hits above the detection limits.*

Total Lead
SW6010=

**Total lead was detected at 16 mg/kg with a detection limit of 5 mg/kg.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

SOIL

05-003R-BH 11' Lab ID# 941953-0009

VOA/SW8240 =

**Hit on Carbon Disulfide at 30 ug/kg and Benzene at 30 ug/kg with detection limits of 25 ug/kg. Acetone was detected at 37.89 ug/kg, 2-Butanone detected at 938.36 ug/kg, 2-Hexanone detected at 142.41 ug/kg, and 4-Methyl-2-Pentanone detected at 218.33 ug/kg with detection limits of 50 ug/kg. 1,1,2-Trichloroethane was detected at 62.91 ug/kg a with detection limit of 25 ug/kg. These compounds were not stated on the Report Form but were detected on the Quant report. These need corrections.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

**Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**Hit was detected at 3200 ug/kg with a detection limit of 500 ug/kg.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/kg.*

**Blanks were clean of any hits above the detection limits.*

Total Lead
SW6010=

**Total lead was detected at 8.5 mg/kg with a detection limit of 5 mg/kg.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

SOIL

05-003R-BH 15' Lab ID# 941953-0010

VOA/SW8240 =

**Hit on Carbon Disulfide at 30 ug/kg and Benzene at 30 ug/kg with detection limits of 25 ug/kg. Hit on 4-Methyl-2-Pentanone was detected at 16.54 ug/kg with detection limit of 10 ug/kg. This compound was not stated on the Report Form but were detected on the Quant report. This needs correction.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

**Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**Hit was detected at 1200 ug/kg with a detection limit of 500 ug/kg.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/kg.*

**Blanks were clean of any hits above the detection limits.*

Total Lead
SW6010=

**Total lead was detected at 11 mg/kg with a detection limit of 5 mg/kg.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

SOIL

05-004R-BH 1.5' Lab ID# 941953-0011

VOA/SW8240 =

*Hit on Ethylbenzene at 23 ug/kg with detection limits of 5 ug/kg. Hit on 2-Butanone at 470.60 ug/kg, 2-Hexanone at 28.41 ug/kg with detection limits of 10 ug/kg. Hits on 1,1,2-Trichloroethane at 51.27 ug/kg and Total Xylenes at 45.19 ug/kg with detection limits of 5 ug/kg. These compounds were not stated on the Report Form but were detected on the Quant report. These need correction.

*All met 14 day holding time.

*COC information verified.

*All surrogate recoveries were within QC limits.

*Blanks were clean and no compounds were detected above the detection limits.

*Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?

TPH/SW8015-Gas=

*Met 28 day holding time.

*COC information verified.

*No hit was detected above the detection limit of 100 ug/kg. The Report form states a detection limit of 500 ug/kg, this needs to be corrected.

*Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

*Met 28 day holding time.

*COC information verified.

*No hit was detected above the detection limit of 10 mg/kg.

*Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

*Total lead was detected at 37 mg/kg with a detection limit of 5 mg/kg.

*Met 6 month holding times.

*COC information verified.

SAMPLE:

SOIL

05-004R-BH 6'

Lab ID# 941953-0012

VOA/SW8240 =

*Hit on 2-Butanone at 32,839 ug/kg. 2-Hexanone at 12,622 ug/kg. 4-Methyl-2-Pentanone at 2,983 with detection limits of 1000 ug/kg. Hits on 1,1,2-Trichloroethane at 6,603 ug/kg. Ethylbenzene at 3,108 ug/kg. and Total Xylenes at 6,460 ug/kg with detection limits of 500 ug/kg. These compounds were not stated on the Report Form but were detected on the Quant report. These need correction. A dilution of 100x was performed.

*All met 14 day holding time.

*COC information verified.

*All surrogate recoveries were within QC limits.

*Blanks were clean and no compounds were detected above the detection limits.

*Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?

TPH/SW8015-Gas=

*Met 28 day holding time.

*COC information verified.

*Hit was detected at 19,000 ug/kg with a detection limit of 500 ug/kg.

*Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

*Met 28 day holding time.

*COC information verified.

*No hit was detected above the detection limit of 10 mg/kg.

*Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

*Total lead was detected at 16 mg/kg with a detection limit of 5 mg/kg.

*Met 6 month holding times.

*COC information verified.

SAMPLE:

SOIL

05-004R-BH 11' Lab ID# 941953-0013

VCA/SW8240 =

*Hit on 2-Butanone at 38,500 ug/kg, 2-Hexanone at 1,009 ug/kg, 4-Methyl-2-Pentanone at 24,151 with detection limits of 1000 ug/kg. Hits on 1,1,2-Trichloroethane at 1,144.03 ug/kg with detection limit of 500 ug/kg. These compounds were not stated on the Report Form but were detected on the Quant report. These need correction. A dilution of 100x was performed.

*All met 14 day holding time.

*COC information verified.

*All surrogate recoveries were within QC limits.

*Blanks were clean and no compounds were detected above the detection limits.

*Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?

TPH/SW8015-Gas=

*Met 28 day holding time.

*COC information verified.

*Hit was detected at 8400 ug/kg with a detection limit of 500 ug/kg. Report Form show a detection limit of 100 ug/kg and Quant Report shows 500 ug/kg. Needs to be corrected to 500 ug/kg.

*Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

*Met 28 day holding time.

*COC information verified.

*No hit was detected above the detection limit of 10 mg/kg.

*Blanks were clean of any hits above the detection limits.

Total Lead

SW6010=

*Total lead was detected at 16 mg/kg with a detection limit of 5 mg/kg.

*Met 6 month holding times.

*COC information verified.

SAMPLE:

SOIL

05-005 RBH 1.5' Lab ID# 941941-0001

VOA/SW8240 =

*Hit on 4-Methyl-2-Pentanone at 21.90 ug/l with a detection limit of 10 ug/l on the Quant Report as a water but was not stated on the Report form as a soil.

*All met 14 day holding time.

*COC information verified.

*All surrogate recoveries were within QC limits.

*Blanks were clean and no compounds were detected above the detection limits.

*Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?

TPH/SW8015-Gas=

*Met 28 day holding time.

*COC information verified.

*No hit was detected above the detection limit of 100 ug/kg. The Report Form states a detection limit of 500 ug/kg, this needs to be corrected.

*Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

*Met 28 day holding time.

*COC information verified.

*No hit was detected above the detection limit of 10 mg/kg.

*Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

*Total lead was detected at 12 mg/kg above detection limit of 10 mg/kg.

*Met 6 month holding times.

*COC information verified.

SAMPLE:

SOIL

05-005 RBH 6'

Lab ID# 941941-0005

VOA/SW8240 =

*No hits were detected above the assigned detection limits.

*All met 14 day holding time.

*COC information verified.

*All surrogate recoveries were within QC limits.

*Blanks were clean and no compounds were detected above the detection limits.

*Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?

TPH/SW8015-Gas=

*Met 28 day holding time.

*COC information verified.

*No hit was detected above the detection limit of 100 ug/kg. Report Form states a 500 ug/kg detection limit, this needs to be corrected.

*Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

*Met 28 day holding time.

*COC information verified.

*No hit was detected above the detection limit of 10 mg/kg.

*Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

*Total lead was not detected above the detection limit of 10 mg/kg.

*Met 6 month holding times.

*COC information verified.

SAMPLE:

SOIL

05-005 RBH 6.5'-8'

Lab ID# 941941-0002

VOA/SW8240 =

*Hit on Acetone at 29 ug/kg with a detection limit of 10 ug/kg.

*All met 14 day holding time.

*COC information verified.

*All surrogate recoveries were within QC limits.

*Blanks were clean and no compounds were detected above the detection limits.

*Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?

TPH/SW8015-Gas=

*Met 28 day holding time.

*COC information verified.

*No hit was detected above the detection limit of 100 ug/kg.

*Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

*Met 28 day holding time.

*COC information verified.

*No hit was detected above the detection limit of 10 mg/kg.

*Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

*Total lead was not detected above the detection limit of 10 mg/kg.

*Met 6 month holding times.

*COC information verified.

SAMPLE:

SOIL

05-005 RBH 6.5'-8'MS

Lab ID# 941941-0003

VOA/SW8240 =

**All spiked results were detected within QC Range.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

**Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**Matrix Spike result was within QC Range.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**Matrix Spike results were within QC Range.*

**Blanks were clean of any hits above the detection limits.*

Total Lead
SW6010=

**Total lead Matrix Spike result was within QC Range.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

SOIL

05-005 RBH 6.5'-8'MSD Lab ID# 941941-0004

VOA/SW8240 =

**All spiked results were detected within QC Range. All RPD's were within QC Range.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

**Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**Matrix Spike result was within QC Range. All RPD's were within QC Range.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**Matrix Spike results were within QC Range. All RPD's were within QC Range.*

**Blanks were clean of any hits above the detection limits.*

Total Lead
SW6010=

**Total lead Matrix Spike result was within QC Range. All RPD's were within QC Range.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

SOIL

05-005 RBH 11.5'

Lab ID# 941941-0006

VOA/SW8240 =

**No hits were detected above the assigned detection limits.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

**Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 100 ug/kg.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/kg.*

**Blanks were clean of any hits above the detection limits.*

Total Lead
SW6010=

**Total lead was not detected above the detection limit of 10 mg/kg.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

SOIL

05-005 RBH 11.5'-13'
(Duplicate)

Lab ID# 941941-0007

VOA/SW8240 =

**Methylene Chloride was detected at 5.20 ug/l with a 5 ug/l detection limit.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
*Blanks were clean and no compounds were detected above the detection limits.
Sample was run as a WATER sample, not a SOIL. Units on quant report are reported in ug/l. Was sample run as a water and were detection limits applied as a water sample?

TPH/SW8015-Gas=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 100 ug/kg.
Blanks were clean of any hits above the detection limits.

TPH/SW8015-Diesel=

**Met 28 day holding time.
*COC information verified.
*No hit was detected above the detection limit of 10 mg/kg.
Blanks were clean of any hits above the detection limits.

Total Lead
SW6010=

**Total lead was not detected above the detection limit of 10 mg/kg.
*Met 6 month holding times.
COC information verified.

SAMPLE:

WATER

EB-1

Lab ID# 941849-0018

VOA/SW8240 =

***Acetone was detected at 13 ug/l with a detection limit of 10 ug/l.**

***All met 14 day holding time.**

***COC information verified.**

***All surrogate recoveries were within QC limits.**

***Blanks were clean and no compounds were detected above the detection limits.**

TPH/SW8015-Gas=

***Met 28 day holding time.**

***COC information verified.**

***No hit was detected above the detection limit of 100 ug/kg.**

***Blanks were clean of any hits above the detection limits.**

TPH/SW8015-Diesel=

***Met 28 day holding time.**

***COC information verified.**

***No hit was detected above the detection limit of 10 mg/l.**

***Blanks were clean of any hits above the detection limits.**

Total Lead

SW6010=

***Total lead was not detected above the detection limit of .005 mg/l.**

***Met 6 month holding times.**

***COC information verified.**

SAMPLE:

WATER

EB-1

Lab ID# 941941-0009

VOA/SW8240 =

***No hits were detected above the assigned detection limits.**

***All met 14 day holding time.**

***COC information verified.**

***All surrogate recoveries were within QC limits.**

***Blanks were clean and no compounds were detected above the detection limits.**

TPH/SW8015-Gas=

***Met 28 day holding time.**

***COC information verified.**

***No hit was detected above the detection limit of 100 ug/l.**

***Blanks were clean of any hits above the detection limits.**

TPH/SW8015-Diesel=

***Met 28 day holding time.**

***COC information verified.**

***No hit was detected above the detection limit of 10 mg/l.**

***Blanks were clean of any hits above the detection limits.**

Total Lead

SW6010=

***Total lead was not detected above the detection limit of 0.100 mg/l.**

***Met 6 month holding times.**

***COC information verified.**

SAMPLE:

WATER

EB-2

Lab ID# 941849-0019

VOA/SW8240 =

***No hits were detected above the assigned detection limits.**

***All met 14 day holding time.**

***COC information verified.**

***All surrogate recoveries were within QC limits.**

***Blanks were clean and no compounds were detected above the detection limits.**

TPH/SW8015-Gas=

***Met 28 day holding time.**

***COC information verified.**

***No hit was detected above the detection limit of 100 ug/kg.**

***Blanks were clean of any hits above the detection limits.**

TPH/SW8015-Diesel=

***Met 28 day holding time.**

***COC information verified.**

***No hit was detected above the detection limit of 10 mg/l.**

***Blanks were clean of any hits above the detection limits.**

**Total Lead
SW6010=**

***Total lead was not detected above the detection limit of .005 mg/l.**

***Met 6 month holding times.**

***COC information verified.**

SAMPLE:

WATER

EB-2

Lab ID# 941979-0008

VOA/SW8240 =

**Hits were detected for Acetone at 11 ug/l and 2-Butanone at 14 ug/l with detection limits of 10 ug/l.*

**Did not meet 7 day holding time, expired over one day.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 100 ug/l.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/l.*

**Blanks were clean of any hits above the detection limits.*

**Total Lead
SW6010=**

**Total lead was detected at 7.4 mg/l with a detection limit of 1 mg/l.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

WATER

EB-6

Lab ID# 941953-0014

VOA/SW8240 =

**Hit on Acetone at 11 ug/l and 2-Butanone at 14 ug/l with detection limits of 10 ug/l.*

**All met 7 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 100 ug/l.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**Hit was detected at 620 mg/l that was above the detection limit of 10 mg/kg. Concerned!*

**Blanks were clean of any hits above the detection limits.*

Total Lead
SW6010=

**Total lead was not detected above the detection limit of 0.050 mg/l.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

WATER

EQUIPMENT BLANK

Lab ID# 941966-0005

VOA/SW8240 =

**Hit was detected on 2-Butanone at 10.47 ug/l with a detection limit of 10 ug/l.
The Report Form dos not indicate this hit but the Quant Report shows a hit.
Correction needed.*

**Did not meet 7 day holding time, expired over one day.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 100 ug/l.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/l.*

**Blanks were clean of any hits above the detection limits.*

Total Lead

SW6010=

**Total lead was not detected above the detection limit of 1 mg/l.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

WATER

FB-1

Lab ID# 941941-0008

VOA/SW8240 =

**Chloroform was detected at 47 ug/l with a detection limit of 5 ug/l and 4-Methyl-2-pentanone at 12 ug/l with a detection limit of 10 ug/l.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 100 ug/l.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/l.*

**Blanks were clean of any hits above the detection limits.*

Total Lead

SW6010=

**Total lead was not detected above the detection limit of 0.100 mg/l.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

WATER

FB-2

Lab ID# 941953-0015

VOA/SW8240 =

**Hit on Carbon Disulfide at 52 ug/l and Chloroform at 26 ug/l with detection limits of 5 ug/l.*

**All met 7 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

TPH/SW8015-Gas=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 100 ug/l.*

**Blanks were clean of any hits above the detection limits.*

TPH/SW8015-Diesel=

**Met 28 day holding time.*

**COC information verified.*

**No hit was detected above the detection limit of 10 mg/kg.*

**Blanks were clean of any hits above the detection limits.*

**Total Lead
SW6010=**

**Total lead was not detected above the detection limit of 0.050 mg/l.*

**Met 6 month holding times.*

**COC information verified.*

SAMPLE:

WATER

FIELD BLANK

Lab ID# 941966-0004

VOA/SW8240 =

****No hits were detected above the assigned detection limits.***

****Did not meet 7 day holding time, expired over one day.***

****COC information verified.***

****All surrogate recoveries were within QC limits.***

****Blanks were clean and no compounds were detected above the detection limits.***

TPH/SW8015-Gas=

****Met 28 day holding time.***

****COC information verified.***

****No hit was detected above the detection limit of 100 ug/l.***

****Blanks were clean of any hits above the detection limits.***

TPH/SW8015-Diesel=

****Met 28 day holding time.***

****COC information verified.***

****No hit was detected above the detection limit of 10 mg/l.***

****Blanks were clean of any hits above the detection limits.***

**Total Lead
SW6010=**

****Total lead was not detected above the detection limit of 1 mg/l.***

****Met 6 month holding times.***

****COC information verified.***

SAMPLE:

WATER

TRIP BLANK

Lab ID# 941996-0003

VOA/SW8240 =

**No hits were detected above the assigned detection limits.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

SAMPLE:

WATER

TRIP BLANK

Lab ID# 941987-0006

VOA/SW8240 =

**A hit was detected above the detection limit for Acetone at 17.38 with a detection limit of 10 ug/l. This was not reported on the Report Form and needs to be corrected.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

SAMPLE:

WATER

TRIP BLANK

Lab ID# 941953-0016

VOA/SW8240 =

**No hits were detected above the assigned detection limits.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

SAMPLE:

WATER

TRIP BLANK

Lab ID# 941979-0009

VOA/SW8240 =

**No hits were detected above the assigned detection limits.*

**All met 14 day holding time.*

**COC information verified.*

**All surrogate recoveries were within QC limits.*

**Blanks were clean and no compounds were detected above the detection limits.*

SAMPLE:

WATER

TRIP BLANK

Lab ID# 941966-0002

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
Blanks were clean and no compounds were detected above the detection limits.

SAMPLE:

WATER

TRIP BLANK

Lab ID# 941941-0010

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
Blanks were clean and no compounds were detected above the detection limits.

SAMPLE:

WATER

TRIP BLANK w/ EB-1

Lab ID# 941849-0020

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
Blanks were clean and no compounds were detected above the detection limits.

SAMPLE:

WATER

TRIP BLANK w/ EB-2

Lab ID# 941849-0021

VOA/SW8240 =

**No hits were detected above the assigned detection limits.
*All met 14 day holding time.
*COC information verified.
*All surrogate recoveries were within QC limits.
Blanks were clean and no compounds were detected above the detection limits.

APPENDIX G

**CHEMICAL ANALYSES RESULTS FOR
SOIL AND GROUNDWATER SAMPLES**

EXPLANATION OF TABLE ORGANIZATION AND NOMENCLATURE

Each table in the appendix is a matrix which consists of samples (listed in columns) and analyses (listed in rows). In some cases, the matrix consists of more samples (columns) and/or more analyses (rows) than can be presented on a single sheet. The method of presentation used is that for a specific set of parameters (rows) with the results for all the samples (columns) analyzed presented. The table continuation pages are labelled as such for each parameter. For the next set of parameters, the results are given for all the samples analyzed. The physical pages themselves are numbered sequentially as they appear in this appendix.

The following nomenclature is used in the tables:

Parameter:	Parameter for which the analysis was performed.
Location No.:	The sampling location identifier.
Sample Date:	The sampling date.
Lab Sample No.:	The numeric identifier assigned to the sample by the laboratory.
U:	Indicates sample was analyzed for but was not detected.

Table G.1
Summary of Volatile Organic Compounds Detected in Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

(Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

Location: Sample Date: Lab Sample No.:		BG-001BH 1.5' 08/12/94 941996-0001	BG-001BH 9' 08/12/94 941996-0002
VOC	Matrix:	Soil	Soil
Acetone		10U	10U
Benzene		5U	5U
Bromodichloromethane		5U	5U
Bromoform		5U	5U
Bromomethane		10U	10U
2-Butanone		10U	10U
Carbon disulfide		8	5U
Carbon tetrachloride		5U	5U
Chlorobenzene		5U	5U
Chlorodibromomethane		5U	5U
Chloroethane		10U	10U
2-Chloroethylvinyl ether		10U	10U
Chloroform		5U	5U
Chloromethane		10U	10U
1,1-Dichloroethane		5U	5U
1,2-Dichloroethane		5U	5U
1,1-Dichloroethene		5U	5U
Total 1,2-Dichloroethenes		5U	5U
1,2-Dichloropropane		5U	5U
cis-1,3-Dichloropropene		5U	5U
trans-1,3-Dichloropropene		5U	5U
Ethylbenzene		5U	5U
2-Hexanone		10U	10U
Methylene Chloride		5U	5U
4-Methyl-2-pentanone		10U	10U
Styrene		5U	5U
1,1,2,2-Tetrachloroethane		5U	5U
Tetrachloroethane		5U	5U
1,1,1-Trichloroethane		5U	5U
1,1,2-Trichloroethane		5U	5U
Trichloroethane		5U	5U
Toluene		5U	5U
Vinyl acetate		10U	10U
Vinyl chloride		10U	10U
Total Xylenes		5U	5U

VOC - Volatile Organic Compounds.
 BG - Background.
 BH - Borehole.

U - Compound analyzed for but not detected. Number indicates the detection limit.

Table G.2
Summary of TPH Compounds Detected in Background Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

Location:	BG-001BH 1.5'	BG-001BH 9'	BG-001MW A	BG-001MW B
Sample Date:	08/12/94	08/12/94	08/10/94	08/10/94
Lab Sample No.:	941996-0001	941996-0002	941979-0003	941979-0006
TPH Matrix:	Soil	Soil	Water	Water
Diesel (mg/kg)	10U	10U	10U	10U
Gasoline (µg/kg)	100U	100U	100U	250

TPH – Total Petroleum Hydrocarbons.

BG – Background.

BH – Borehole.

MW – Monitoring Well.

U – Compound analyzed for but not detected. Number indicates the detection limit.

Table G.3
Summary of Lead Detected in Background Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

(Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

Location:	BG-001BH 1.5'	BG-001BH 9'
Sample Date:	08/12/94	08/12/94
Lab Sample No.:	941996-0001	941996-0002
Metal Matrix:	Soil	Soil
Lead	10U	10U

BG – Background.

BH – Borehole.

U – Compound analyzed for but not detected.
Number indicates the detection limit.

Table G.4
Summary of Volatile Organic Compounds Detected in Background Water Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

(Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

Location: Sample Date: Lab Sample No.:	BG-001MW A 08/10/94 941979-0003	BG-001MW B 08/10/94 941979-0006	BG-001MW 12/08/94 943126-0001
VOC Matrix:	Water	Water	Water
Acetone	10U	10U	10U
Benzene	5U	5U	5U
Bromodichloromethane	5U	5U	5U
Bromoform	5U	5U	5U
Bromomethane	10U	10U	10U
2-Butanone	10U	10U	10U
Carbon disulfide	5U	5U	5U
Carbon tetrachloride	5U	5U	5U
Chlorobenzene	5U	5U	5U
Chlorodibromomethane	10U	10U	10U
Chloroethane	10U	10U	10U
2-Chloroethylvinyl ether	5U	5U	5U
Chloroform	10U	10U	10U
Chloromethane	5U	5U	5U
1,1-Dichloroethane	5U	5U	5U
1,2-Dichloroethane	5U	5U	5U
1,1-Dichloroethene	5U	5U	5U
Total 1,2-Dichloroethenes	5U	5U	5U
1,2-Dichloropropane	5U	5U	5U
cis-1,3-Dichloropropene	5U	5U	5U
trans-1,3-Dichloropropene	5U	5U	5U
Ethylbenzene	5U	5U	5U
2-Hexanone	10U	10U	10U
Methylene Chloride	5U	5U	5U
4-Methyl-2-pentanone	10U	10U	10U
Styrene	5U	5U	5U
1,1,2,2-Tetrachloroethane	5U	5U	5U
Tetrachloroethane	5U	5U	5U
1,1,1-Trichloroethane	5U	5U	5U
1,1,2-Trichloroethane	5U	5U	5U
Trichloroethane	5U	5U	5U
Toluene	5U	5U	5U
Vinyl acetate	10U	10U	10U
Vinyl chloride	10U	10U	10U
Total Xylenes	5U	5U	5U

VOC – Volatile Organic Compounds.
 BG – Background.
 MW – Monitoring Well.

U – Compound analyzed for but not detected. Number indicates the detection limit.

Table G.5
Summary of TPH Compounds Detected in Background Water Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

Location: Sample Date: Lab Sample No.:		BG-001MW 12/07/94 943126-0001
TPH	Matrix:	Water
Diesel (mg/kg)		50U
Gasoline (µg/kg)		190

TPH – Total Petroleum Hydrocarbons.
BG – Background.
MW – Monitoring Well.
mg/kg – milligrams per kilogram.

µg/kg – micrograms per kilogram.
U – Compound analyzed for but not detected. Number indicates the detection limit.

Table G.6
Summary of Lead Detected in Background Water Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
(Results in milligrams per kilogram.)

Location: Sample Date: Lab Sample No.:	BG-001MW A 08/10/94 941979-0003	BG-001MW B 08/10/94 941979-0006	BG-001MW 12/07/94 943126-0001
Metal	Matrix:	Water	Water
Lead		1U	0.05U

BG – Background.
MW – Monitoring Well.

U – Compound analyzed for but not detected. Number indicates the detection limit.

Table G.7

**Summary of Volatile Organic Compounds Detected in Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California**

(Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

Location: Sample Date: Lab Sample No.:	04-001BH 1' 07/28/94 941849-0004	04-001BH 11' 07/28/94 941849-0005	04-001BH 21' 07/28/94 941849-0006	04-002BH 1' 07/28/94 941849-0001	04-002BH 6' 07/28/94 941849-0002	04-002BH 11' 07/28/94 941849-0003	04-003BH 1' 07/28/94 941849-0007
VOC	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Acetone	10U	10U	10U	10U	10U	10U	10U
Benzene	5U	5U	5U	5U	5U	5U	5U
Bromodichloromethane	5U	5U	5U	5U	5U	5U	5U
Bromoform	5U	5U	5U	5U	5U	5U	5U
Bromomethane	10U	10U	10U	10U	10U	10U	10U
2-Butanone	10U	10U	10U	10U	10U	10U	10U
Carbon disulfide	5U	5U	5U	5U	5U	5U	5U
Carbon tetrachloride	5U	5U	5U	5U	5U	5U	5U
Chlorobenzene	5U	5U	5U	5U	5U	5U	5U
Chlorodibromomethane	5U	5U	5U	5U	5U	5U	5U
Chloroethane	10U	10U	10U	10U	10U	10U	10U
2-Chloroethylvinyl ether	10U	10U	10U	10U	10U	10U	10U
Chloroform	5U	5U	5U	5U	5U	5U	5U
Chloromethane	10U	10U	10U	10U	10U	10U	10U
1,1-Dichloroethane	5U	5U	5U	5U	5U	5U	5U
1,2-Dichloroethane	5U	5U	5U	5U	5U	5U	5U
1,1-Dichloroethene	5U	5U	5U	5U	5U	5U	5U
Total 1,2-Dichloroethenes	5U	5U	5U	5U	5U	5U	5U
1,2-Dichloropropane	5U	5U	5U	5U	5U	5U	5U
cis-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U	5U
trans-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U	5U
Ethylbenzene	5U	5U	5U	5U	5U	5U	5U
2-Hexanone	10U	10U	10U	10U	10U	10U	10U
Methylene Chloride	5U	5U	5U	5U	5U	5U	6
4-Methyl-2-pentanone	10U	10U	10U	10U	10U	10U	10U
Styrene	5U	5U	5U	5U	5U	5U	5U
1,1,2,2-Tetrachloroethane	5U	5U	5U	5U	5U	5U	5U

Table G.7 (Continued)
Summary of Volatile Organic Compounds Detected in Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

Location: Sample Date: Lab Sample No.:	04-001BH 1' 07/28/94 941849-0004	04-001BH 11' 07/28/94 941849-0005	04-001BH 21' 07/28/94 941849-0006	04-002BH 1' 07/28/94 941849-0001	04-002BH 6' 07/28/94 941849-0002	04-002BH 11' 07/28/94 941849-0003	04-003BH 1' 07/28/94 941849-0007
VOC	Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Tetrachloroethane		5U	5U	5U	5U	5U	5U
1,1,1-Trichloroethane		5U	5U	5U	5U	5U	5U
1,1,2-Trichloroethane		5U	5U	5U	5U	5U	5U
Trichloroethane		5U	5U	5U	5U	5U	5U
Toluene		5U	5U	5U	5U	5U	5U
Vinyl acetate		10U	10U	10U	10U	10U	10U
Vinyl chloride		10U	10U	10U	10U	10U	10U
Total Xylenes		5U	5U	5U	5U	5U	5U

Table G.7 (Continued)
Summary of Volatile Organic Compounds Detected in Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

Location: Sample Date: Lab Sample No.:	04-003BH 6' 07/28/94 941849-0008	04-003BH 11' 07/28/94 941849-0009	04-004BH 1.5' 07/28/94 941849-0010	04-004BH 6' 07/28/94 941849-0012	04-004BH 7' 07/28/94 941849-0013	04-004BH 11.5' 07/28/94 941849-0016
VOC	Soil	Soil	Soil	Soil	Soil	Soil
Acetone	10U	10U	10U	10U	10U	10U
Benzene	5U	5U	5U	5U	5U	5U
Bromodichloromethane	5U	5U	5U	5U	5U	5U
Bromoform	5U	5U	5U	5U	5U	5U
Bromomethane	10U	10U	10U	10U	10U	10U
2-Butanone	10U	10U	10U	10U	10U	10U
Carbon disulfide	5U	5U	5U	5U	5U	5U
Carbon tetrachloride	5U	5U	5U	5U	5U	5U
Chlorobenzene	5U	5U	5U	5U	5U	5U
Chlorodibromomethane	5U	5U	5U	5U	5U	5U
Chloroethane	10U	10U	10U	10U	10U	10U
2-Chloroethylvinyl ether	10U	10U	10U	10U	10U	10U
Chloroform	5U	5U	5U	5U	5U	5U
Chloromethane	10U	10U	10U	10U	10U	10U
1,1-Dichloroethane	5U	5U	5U	5U	5U	5U
1,2-Dichloroethane	5U	5U	5U	5U	5U	5U
1,1-Dichloroethene	5U	5U	5U	5U	5U	5U
Total 1,2-Dichloroethenes	5U	5U	5U	5U	5U	5U
1,2-Dichloropropane	5U	5U	5U	5U	5U	5U
cis-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U
trans-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U
Ethylbenzene	5U	5U	5U	5U	5U	5U
2-Hexanone	10U	10U	10U	10U	10U	10U
Methylene Chloride	6	5U	5	5U	5U	6
4-Methyl-2-pentanone	10U	10U	10U	10U	10U	10U
Styrene	5U	5U	5U	5U	5U	5U
1,1,2,2-Tetrachloroethane	5U	5U	5U	5U	5U	5U

Table G.7 (Concluded)
Summary of Volatile Organic Compounds Detected in Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

Location: Sample Date: Lab Sample No.:	04-003BH 6' 07/28/94 941849-0008	04-003BH 11' 07/28/94 941849-0009	04-004BH 1.5' 07/28/94 941849-0010	04-004BH 6' 07/28/94 941849-0012	04-004BH 7' 07/28/94 941849-0013	04-004BH 11.5' 07/28/94 941849-0016
VOC	Matrix:	Soil	Soil	Soil	Soil	Soil
Tetrachloroethane		5U	5U	5U	5U	5U
1,1,1-Trichloroethane		5U	5U	5U	5U	5U
1,1,2-Trichloroethane		5U	5U	5U	5U	5U
Trichloroethane		5U	5U	5U	5U	5U
Toluene		5U	5U	5U	5U	5U
Vinyl acetate		10U	10U	10U	10U	10U
Vinyl chloride		10U	10U	10U	10U	10U
Total Xylenes		5U	5U	5U	5U	5U

VOC - Volatile Organic Compound.
 BH - Borehole.

U - Compound analyzed for but not detected. Number indicates the detection limit.

Table G.8
Summary of TPH Compounds Detected in Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

Location:	04-001BH 1'	04-001BH 11'	04-001BH 21'	04-002BH 1'	04-002BH 6'	04-002BH 11'	04-003BH 1'
Sample Date:	07/28/94	07/28/94	07/28/94	07/28/94	07/28/94	07/28/94	07/28/94
Lab Sample No.:	941849-0004	941849-0005	941849-0006	941849-0001	941849-0002	941849-0003	941849-0007
TPH	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Diesel (mg/kg)	10U	10U	10U	10U	10U	10U	10U
Gasoline (µg/kg)	500U	500U	500U	500U	500U	500U	500U
Location:	04-003BH 6'	04-003BH 11'	04-004BH 1.5'	04-004BH 6'	04-004BH 7'	04-004BH 11.5'	
Sample Date:	07/28/94	07/28/94	07/28/94	07/28/94	07/28/94	07/28/94	
Lab Sample No.:	941849-0008	941849-0009	941849-0010	941849-0012	941849-0013	941849-0016	
TPH	Soil	Soil	Soil	Soil	Soil	Soil	
Diesel (mg/kg)	10U	10U	10U	10U	10U	10U	
Gasoline (µg/kg)	500U	500U	500U	500U	500U	500U	

TPH - Total Petroleum Hydrocarbons.

BH - Borehole.

mg/kg - milligrams per kilogram.

µg/kg - micrograms per kilogram.

U - Compound analyzed for but not detected. Number indicates the detection limit.

Table G.9
Summary of Lead Detected in Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

Location:	04-001BH 1'	04-001BH 11'	04-001BH 21'	04-002BH 1'	04-002BH 6'	04-002BH 11'	04-003BH 1'
Sample Date:	07/28/94	07/29/94	07/28/94	07/28/94	07/28/94	07/28/94	07/28/94
Lab Sample No.:	941849-0004	941849-0005	941849-0006	941849-0001	941849-0002	941849-0003	941849-0007
Metal	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Matrix:							
Lead	210	7.3	8.3	11	10	5U	59
Location:	04-003BH 6'	04-003BH 11'	04-004BH 1.5'	04-004BH 6'	04-004BH 7'	04-004BH 11.5'	
Sample Date:	07/28/94	07/28/94	07/28/94	07/28/94	07/28/94	07/28/94	
Lab Sample No.:	941849-0008	941849-0009	941849-0010	941849-0012	941849-0013	941849-0016	
Metal	Soil	Soil	Soil	Soil	Soil	Soil	
Matrix:							
Lead	11	8.6	590	15	14	5U	

BH - Borehole.

U - Compound analyzed for but not detected. Number indicates the detection limit.

Table G.10
Summary of Volatile Organic Compounds Detected in Water Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

VOC	Matrix:	04-001MW A 08/10/94 941979-0001		04-001MW B 08/11/94 941987-0001		04-001MW 12/07/94 943126-0002		04-002MW A 08/10/94 941979-0005		04-002MW B 08/10/94 941979-0002		04-001MW 12/07/94 943126-0002		04-002MW 12/07/94 943126-0003		04-002 MW DUP 12/07/94 943126-0004	
		Water		Water		Water		Water		Water		Water		Water		Water	
Acetone		10U		10U		10U		10U		10U		10U		50U		50U	
Benzene		5U		5U		5U		5U		5U		5U		25U		25U	
Bromodichloromethane		5U		5U		5U		5U		5U		5U		25U		25U	
Bromomethane		5U		5U		5U		5U		5U		5U		25U		25U	
Bromomethane		10U		10U		10U		10U		10U		10U		50U		50U	
2-Butanone		10U		10U		10U		10U		10U		10U		50U		50U	
Carbon disulfide		5U		5U		5U		5U		5U		5U		25U		25U	
Carbon tetrachloride		5U		5U		5U		5U		5U		5U		25U		25U	
Chlorobenzene		5U		5U		5U		5U		5U		5U		25U		25U	
Chlorodibromomethane		10U		10U		10U		10U		10U		10U		50U		50U	
Chloroethane		10U		10U		10U		10U		10U		10U		50U		50U	
2-Chloroethylvinyl ether		5U		5U		5U		5U		5U		5U		25U		25U	
Chloroform		10U		10U		10U		10U		10U		10U		50U		50U	
Chloromethane		5U		5U		5U		5U		5U		5U		25U		25U	
1,1-Dichloroethane		5U		5U		5U		5U		5U		5U		25U		25U	
1,2-Dichloroethane		5U		5U		5U		5U		5U		5U		25U		25U	
1,1-Dichloroethene		5U		5U		5U		5U		5U		5U		25U		25U	
Total 1,2-Dichloroethenes		5U		5U		5U		5U		5U		5U		25U		25U	
1,2-Dichloropropane		5U		5U		5U		5U		5U		5U		25U		25U	
cis-1,3-Dichloropropene		5U		5U		5U		5U		5U		5U		25U		25U	
trans-1,3-Dichloropropene		5U		5U		5U		5U		5U		5U		25U		25U	
Ethylbenzene		5U		5U		5U		5U		5U		5U		25U		25U	
2-Hexanone		5U		5U		5U		5U		5U		5U		25U		25U	
Methylene Chloride		10U		10U		10U		10U		10U		10U		50U		50U	
4-Methyl-2-pentanone		5U		5U		5U		5U		5U		5U		25U		25U	
Styrene		5U		5U		5U		5U		5U		5U		25U		25U	
1,1,2,2-Tetrachloroethane		5U		5U		5U		5U		5U		5U		25U		25U	

Table G.10 (Concluded)
Summary of Volatile Organic Compounds Detected in Water Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

Location: Sample Date: Lab Sample No.:	04-001MW A 08/10/94 941979-0001	04-001MW B 08/11/94 941987-0001	04-001MW 12/07/94 943126-0002	04-002MW A 08/10/94 941979-0005	04-002MW B 08/10/94 941979-0002	04-001MW 12/07/94 943126-0002	04-002MW 12/07/94 943126-0003	04-002 MW DUP 12/07/94 943126-0004
VOC Matrix:	Water	Water	Water	Water	Water	Water	Water	Water
Tetrachloroethane	5U	5U	5U	5U	5U	5U	25U	25U
1,1,1-Trichloroethane	5U	5U	5U	5U	5U	5U	25U	25U
1,1,2-Trichloroethane	5U	5U	5U	5U	5U	5U	25U	25U
Trichloroethane	5U	5U	5U	5U	5U	5U	25U	25U
Toluene	5U	5U	5U	5U	5U	5U	25U	25U
Vinyl acetate	10U	10U	10U	10U	10U	10U	50U	50U
Vinyl chloride	10U	10U	10U	10U	10U	10U	50U	50U
Total Xylenes	5U	5U	5U	5U	5U	5U	25U	25U

MW - Monitoring Well.

VOC - Volatile Organic Compounds.

U - Compound analyzed for but not detected. Number indicates the detection limit.

Table G.11
Summary of TPH Compounds Detected in Water Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

Location: Sample Date: Lab Sample No.:	04-001MW A 08/10/94 941979-0001	04-001MW B 08/11/94 941987-0001	04-001MW 12/07/94 943126-0002	04-002MW A 08/10/94 941979-0005	04-002MW B 08/10/94 941979-0002	04-001MW 12/07/94 943126-0002	04-002MW 12/07/94 943126-0003	04-002MW DUP 12/07/94 943126-0004
TPH Matrix:	Water	Water	Water	Water	Water	Water	Water	Water
Diesel (mg/L)	10U	10U	.050U	10	10	50U	.840	.920
Gasoline (µg/L)	100U	530	.100U	1,000	100U	100U	1,400	1,200

TPH -- Total Petroleum Hydrocarbons.

MW -- Monitoring Well.

mg/L -- milligrams per liter.

µg/L -- micrograms per liter.

U -- Compound analyzed for but not detected. Number indicates the detection limit.

Table G.12
Summary of Lead Detected in Water Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

Location: Sample Date: Lab Sample No.:	04-001MW A 08/10/94 941979-0001	04-001MW B 08/11/94 941987-0001		04-002MW A 08/10/94 941979-0005	04-002MW B 08/10/94 941979-0002	04-001MW 12/07/94 943126-0001	04-002MW 12/07/94 943126-0003	04-002MW DUP 12/07/94 943126-0004
Metal Matrix:	Water	Water		Water	Water	Water	Water	Water
Lead (mg/L)	1U	1U		8.3	1U	0.05U	0.05U	0.050U

MW -- Monitoring Well.

U -- Compound analyzed for but not detected. Number indicates the detection limit.

Table G.13
Summary of Volatile Organic Compounds Detected in Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

Location: Sample Date: Lab Sample No.:	BG-001BH 1.5' 08/12/94 941996-0001	BG-001BH 9' 08/12/94 941996-0002	05-001RBH 1.5' 08/06/94 941953-0001	05-001RBH 11.5' 08/06/94 941953-0002	05-001RBH 14' - 15.5' 08/06/94 941953-0004	05-002RBH 2' 08/06/94 941953-0005
VOC	Matrix:	Soil	Soil	Soil	Soil	Soil
Acetone		10U	10U	10U	10U	10U
Benzene		5U	5U	5U	5U	5U
Bromodichloromethane		5U	5U	5U	5U	5U
Bromoform		5U	5U	5U	5U	5U
Bromomethane		10U	10U	10U	10U	10U
2-Butanone		10U	10U	10U	10U	10U
Carbon disulfide	8	5U	5U	5U	5U	5U
Carbon tetrachloride	5U	5U	5U	5U	5U	5U
Chlorobenzene	5U	5U	5U	5U	5U	5U
Chlorodibromomethane	5U	5U	5U	5U	5U	5U
Chloroethane	10U	10U	10U	10U	10U	10U
2-Chloroethylvinyl ether	10U	10U	10U	10U	10U	10U
Chloroform	5U	5U	5U	5U	5U	5U
Chloromethane	10U	10U	10U	10U	10U	10U
1,1-Dichloroethane	5U	5U	5U	5U	5U	5U
1,2-Dichloroethane	5U	5U	5U	5U	5U	5U
1,1-Dichloroethene	5U	5U	5U	5U	5U	5U
Total 1,2-Dichloroethenes	5U	5U	5U	5U	5U	5U
1,2-Dichloropropane	5U	5U	5U	5U	5U	5U
cis-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U
trans-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U
Ethylbenzene	5U	5U	5U	5U	5U	5U
2-Hexanone	10U	10U	10U	10U	10U	6
Methylene Chloride	5U	5U	5U	5U	5U	10U
4-Methyl-2-pentanone	10U	10U	10U	10U	10U	5U
Styrene	5U	5U	5U	5U	5U	5U
1,1,2,2-Tetrachloroethane	5U	5U	5U	5U	5U	5U

Table G.13 (Continued)
 Summary of Volatile Organic Compounds Detected in Soil Samples
 216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

Location: Sample Date: Lab Sample No.:	BG-001BH 1.5' 08/12/94 941996-0001	BG-001BH 9' 08/12/94 941996-0002	05-001RBH 1.5' 08/06/94 941953-0001	05-001RBH 11.5' 08/06/94 941953-0002	05-001RBH 14' - 15.5' 08/06/94 941953-0004	05-002RBH 2' 08/06/94 941953-0005
VOC	Soil	Soil	Soil	Soil	Soil	Soil
Tetrachloroethane	5U	5U	5U	5U	5U	5U
1,1,1-Trichloroethane	5U	5U	5U	5U	5U	5U
1,1,2-Trichloroethane	5U	5U	5U	5U	5U	5U
Trichloroethane	5U	5U	5U	5U	5U	5U
Toluene	5U	5U	5U	5U	5U	5U
Vinyl acetate	10U	10U	10U	10U	10U	10U
Vinyl chloride	10U	10U	10U	10U	10U	10U
Total Xylenes	5U	5U	5U	5U	5U	5U

Table G.13 (Continued)
Summary of Volatile Organic Compounds Detected in Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

VOC	Matrix:	05-002RBH 11' 08/06/94 941953-0006	05-002RBH 15' 08/06/94 941953-0007	05-003RBH 1.5' 08/06/94 941953-0008	05-003RBH 11' 08/06/94 941953-0009	05-003RBH 15' 08/06/94 941953-0010	05-004RBH 1.5' 08/06/94 941953-0011	05-004RBH 6' 08/09/94 941953-0012
Acetone	Soil	59	10U	10U	50U	10U	10U	1,000U
Benzene	Soil	25U	5U	5U	30	5U	5U	500U
Bromodichloromethane	Soil	25U	5U	5U	25U	5U	5U	500U
Bromoform	Soil	25U	5U	5U	25U	5U	5U	500U
Bromomethane	Soil	50U	10U	10U	50U	10U	10U	1,000U
2-Butanone	Soil	50U	10U	10U	50U	10U	10U	1,000U
Carbon disulfide	Soil	30	5U	6	30	5U	5U	500U
Carbon tetrachloride	Soil	25U	5U	5U	25U	5U	5U	500U
Chlorobenzene	Soil	25U	5U	5U	25U	5U	5U	500U
Chlorodibromomethane	Soil	25U	5U	5U	25U	5U	5U	500U
Chloroethane	Soil	50U	10U	10U	50U	10U	10U	1,000U
2-Chloroethylvinyl ether	Soil	50U	10U	10U	50U	10U	10U	1,000U
Chloroform	Soil	25U	5U	5U	25U	5U	5U	500U
Chloromethane	Soil	50U	10U	10U	50U	10U	10U	1,000U
1,1-Dichloroethane	Soil	25U	5U	5U	25U	5U	5U	500U
1,2-Dichloroethane	Soil	25U	5U	5U	25U	5U	5U	500U
1,1-Dichloroethene	Soil	25U	5U	5U	25U	5U	5U	500U
Total 1,2-Dichloroethenes	Soil	25U	5U	5U	25U	5U	5U	500U
1,2-Dichloropropane	Soil	25U	5U	5U	25U	5U	5U	500U
cis-1,3-Dichloropropene	Soil	25U	5U	5U	25U	5U	5U	500U
trans-1,3-Dichloropropene	Soil	25U	5U	5U	25U	5U	5U	500U
Ethylbenzene	Soil	25U	5U	5U	25U	5U	5U	500U
2-Hexanone	Soil	50U	10U	10U	50U	10U	23	1,000U
Methylene Chloride	Soil	25U	5U	5U	25U	5U	10U	500U
4-Methyl-2-pentanone	Soil	50U	10U	10U	50U	10U	10U	1,000U
Styrene	Soil	25U	5U	5U	25U	5U	5U	500U
1,1,2,2-Tetrachloroethane	Soil	25U	5U	5U	25U	5U	5U	500U

Table G.13 (Continued)
Summary of Volatile Organic Compounds Detected in Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

Location: Sample Date: Lab Sample No.:	05-002RBH 11'	05-002RBH 15'	05-003RBH 1.5'	05-003RBH 11'	05-003RBH 15'	05-004RBH 1.5'	05-004RBH 6'
	08/06/94	08/06/94	08/06/94	08/06/94	08/06/94	08/06/94	08/09/94
	941953-0006	941953-0007	941953-0008	941953-0009	941953-0010	941953-0011	941953-0012
VOC	Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Tetrachloroethane		5U	5U	25U	5U	5U	500U
1,1,1-Trichloroethane		5U	5U	25U	5U	5U	500U
1,1,2-Trichloroethane		5U	5U	25U	5U	5U	500U
Trichloroethane		5U	5U	25U	5U	5U	500U
Toluene		5U	5U	25U	5U	5U	500U
Vinyl acetate		10U	10U	50U	10U	10U	1,000U
Vinyl chloride		10U	10U	50U	10U	10U	1,000U
Total Xylenes		5U	5U	25U	5U	5U	500U

Table G.13 (Continued)
Summary of Volatile Organic Compounds Detected in Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

VOC	Location: Sample Date: Lab Sample No.:		05-004RBH 11'		05-005RBH 1.5'		05-005RBH 6.5' - 8'		05-005RBH 6'		05-005RBH 11.5'	
	Matrix:		08/09/94 941953-0013		08/06/94 941941-0001		08/06/94 941941-0002		08/06/94 941941-0005		08/06/94 941941-0006	
			Soil		Soil		Soil		Soil		Soil	
Acetone			1,000U		10U		29		10U		10U	
Benzene			500U		5U		5U		5U		5U	
Bromodichloromethane			500U		5U		5U		5U		5U	
Bromoform			500U		5U		5U		5U		5U	
Bromomethane			1,000U		10U		10U		10U		10U	
2-Butanone			1,000U		10U		10U		10U		10U	
Carbon disulfide			500U		5U		5U		5U		5U	
Carbon tetrachloride			500U		5U		5U		5U		5U	
Chlorobenzene			500U		5U		5U		5U		5U	
Chlorodibromomethane			500U		5U		5U		5U		5U	
Chloroethane			1,000U		10U		10U		10U		10U	
2-Chloroethylvinyl ether			1,000U		10U		10U		10U		10U	
Chloroform			500U		5U		5U		5U		5U	
Chloromethane			1,000U		10U		10U		10U		10U	
1,1-Dichloroethane			500U		5U		5U		5U		5U	
1,2-Dichloroethane			500U		5U		5U		5U		5U	
1,1-Dichloroethene			500U		5U		5U		5U		5U	
Total 1,2-Dichloroethenes			500U		5U		5U		5U		5U	
1,2-Dichloropropane			500U		5U		5U		5U		5U	
cis-1,3-Dichloropropene			500U		5U		5U		5U		5U	
trans-1,3-Dichloropropene			500U		5U		5U		5U		5U	
Ethylbenzene			500U		5U		5U		5U		5U	
2-Hexanone			1,000U		10U		10U		10U		10U	
Methylene Chloride			500U		5U		5U		5U		5U	
4-Methyl-2-pentanone			1,000U		10U		10U		10U		10U	
Styrene			500U		5U		5U		5U		5U	
1,1,2,2-Tetrachloroethane			500U		5U		5U		5U		5U	

Table G.13 (Concluded)
 Summary of Volatile Organic Compounds Detected in Soil Samples
 216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

VOC	Location: Sample Date: Lab Sample No.:		05-004RBH 11' 08/09/94 941953-0013		05-005RBH 1.5' 08/06/94 941941-0001		05-005RBH 6.5' - 8' 08/06/94 941941-0002		05-005RBH 6' 08/06/94 941941-0005		05-005RBH 11.5' 08/06/94 941941-0006	
	Matrix:		Soil		Soil		Soil		Soil		Soil	
Tetrachloroethane			500U		5U		5U		5U		5U	
1,1,1-Trichloroethane			500U		5U		5U		5U		5U	
1,1,2-Trichloroethane			500U		5U		5U		5U		5U	
Trichloroethane			500U		5U		5U		5U		5U	
Toluene			500U		5U		5U		5U		5U	
Vinyl acetate			1,000U		10U		10U		10U		10U	
Vinyl chloride			1,000U		10U		10U		10U		10U	
Total Xylenes			500U		5U		5U		5U		5U	

BG - Background.
 BH - Borehole.

RBH - Resampled Borehole.

U - Compound analyzed for but not detected. Number indicates the detection limit.

Table G.14
Summary of TPH Compounds Detected in Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

Location: Sample Date: Lab Sample No.:	BG-001BH 1.5' 08/12/94 941996-0001	BG-001BH 9' 08/12/94 941996-0002	05-001RBH 1.5' 08/06/94 941953-0001	05-001RBH 11.5' 08/06/94 941953-0002	05-001RBH 14' - 15.5' 08/06/94 941953-0004	05-002RBH 2' 08/06/94 941953-0005
TPH Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Diesel (mg/kg)	10U	10U	10U	10U	10U	10U
Gasoline (µg/kg)	100U	100U	100U	100U	100U	2,200
Location: Sample Date: Lab Sample No.:	05-002RBH 11' 08/06/94 941953-0006	05-002RBH 15' 08/06/94 941953-0007	05-003RBH 1.5' 08/06/94 941953-0008	05-003RBH 11' 08/06/94 941953-0009	05-003RBH 15' 08/06/94 941953-0010	05-004RBH 1.5' 08/06/94 941953-0011
TPH Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Diesel (mg/kg)	10U	10U	10U	10U	10U	10U
Gasoline (µg/kg)	1,100	500U	500U	3,200	1,200	500U
Location: Sample Date: Lab Sample No.:	05-004RBH 6' 08/09/94 941953-0012	05-004RBH 11' 08/09/94 941953-0013	05-005RBH 1.5' 08/06/94 941941-0001	05-005RBH 6.5' - 8' 08/06/94 941941-0002	05-005RBH 6' 08/06/94 941941-0005	05-005RBH 11.5' 08/06/94 941941-0006
TPH Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Diesel (mg/kg)	10U	10U	10U	10U	10U	10U
Gasoline (µg/kg)	19,000	8,400	500U	100U	500U	100U

TPH - Total Petroleum Hydrocarbons.

BG - Background.

BH - Borehole.

RBH - Resampled Borehole.

mg/kg - milligrams per kilogram.

µg/kg - micrograms per kilogram.

U - Compound analyzed for but not detected. Number indicates the detection limit.

Table G.15
Summary of Lead Detected in Soil Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

Location: Sample Date: Lab Sample No.:	BG-001BH 1.5' 08/12/94 941996-0001	BG-001BH 9' 08/12/94 941996-0002	05-001RBH 1.5' 08/06/94 941953-0001	05-001RBH 11.5' 08/06/94 941953-0002	05-001RBH 14' - 15.5' 08/06/94 941953-0004	05-002RBH 2' 08/06/94 941953-0005
Metal	Soil	Soil	Soil	Soil	Soil	Soil
Lead	10U	10U	16	5.0U	5.0U	8.7
Location: Sample Date: Lab Sample No.:	05-002RBH 11' 08/06/94 941953-0006	05-002RBH 15' 08/06/94 941953-0007	05-003RBH 1.5' 08/06/94 941953-0008	05-003RBH 11' 08/06/94 941953-0009	05-003RBH 15' 08/06/94 941953-0010	05-004RBH 1.5' 08/06/94 941953-0011
Metal	Soil	Soil	Soil	Soil	Soil	Soil
Lead	5.0U	5.0U	18	8.5	11	37
Location: Sample Date: Lab Sample No.:	05-004RBH 6' 08/09/94 941953-0012	05-004RBH 11' 08/09/94 941953-0013	05-005RBH 1.5' 08/06/94 941941-0001	05-005RBH 6.5' - 8' 08/06/94 941941-0002	05-005RBH 6' 08/06/94 941941-0005	05-005RBH 11.5' 08/06/94 941941-0006
Metal	Soil	Soil	Soil	Soil	Soil	Soil
Lead	16	5.0U	12	10U	10U	10U

BG - Background.
 BH - Borehole.

RBH - Resampled Borehole.
 U - Compound analyzed for but not detected. Number indicates the detection limit.

Table G.16

**Summary of Volatile Organic Compounds Detected in Water Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California**

(Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

VOC	Location: Sample Date: Lab Sample No.:	BG-001MW A 08/10/94 941979-0003	BG-001MW B 08/10/94 941979-0006	05-001MW A 08/09/94 941966-0001	05-001MW B 08/09/94 941966-0003	05-002MW A 08/11/94 941987-0004	05-002MW B 08/11/94 941987-0005
Matrix:	Water	Water	Water	Water	Water	Water	Water
Acetone	10U	10U	10U	10U	10U	10U	10U
Benzene	5U	5U	5U	5U	5U	5U	5U
Bromodichloromethane	5U	5U	5U	5U	5U	5U	5U
Bromoform	5U	5U	5U	5U	5U	5U	5U
Bromomethane	10U	10U	10U	10U	10U	10U	10U
2-Butanone	10U	10U	10U	10U	10U	10U	10U
Carbon disulfide	5U	5U	5U	5U	5U	5U	5U
Carbon tetrachloride	5U	5U	5U	5U	5U	5U	5U
Chlorobenzene	5U	5U	5U	5U	5U	5U	5U
Chlorodibromomethane	10U	10U	10U	10U	10U	10U	10U
Chloroethane	10U	10U	10U	10U	10U	10U	10U
2-Chloroethylvinyl ether	5U	5U	5U	5U	5U	5U	5U
Chloroform	10U	10U	10U	10U	10U	10U	10U
Chloromethane	5U	5U	5U	5U	5U	5U	5U
1,1-Dichloroethane	5U	5U	5U	5U	5U	5U	5U
1,2-Dichloroethane	5U	5U	5U	5U	5U	5U	5U
1,1-Dichloroethene	5U	5U	5U	5U	5U	5U	5U
Total 1,2-Dichloroethenes	5U	5U	5U	5U	5U	5U	5U
1,2-Dichloropropane	5U	5U	5U	5U	5U	5U	5U
cis-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U	5U
trans-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U	5U
Ethylbenzene	5U	5U	5U	5U	5U	5U	5U
2-Hexanone	10U	10U	10U	10U	10U	10U	10U
Methylene Chloride	5U	5U	5U	5U	5U	5U	5U
4-Methyl-2-pentanone	10U	10U	10U	10U	10U	10U	10U
Styrene	5U	5U	5U	5U	5U	5U	5U
1,1,2,2-Tetrachloroethane	5U	5U	5U	5U	5U	5U	5U

Table G.16 (Continued)
Summary of Volatile Organic Compounds Detected in Water Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

VOC	Location:	BG-001MW A	BG-001MW B	05-001MW A	05-001MW B	05-002MW A	05-002MW B
	Sample Date:	08/10/94	08/10/94	08/09/94	08/09/94	08/11/94	08/11/94
	Lab Sample No.:	941979-0003	941979-0006	941966-0001	941966-0003	941987-0004	941987-0005
Matrix:	Water	Water	Water	Water	Water	Water	Water
Tetrachloroethane	5U	5U	5U	5U	5U	5U	5U
1,1,1-Trichloroethane	5U	5U	5U	5U	5U	5U	5U
1,1,2-Trichloroethane	5U	5U	5U	5U	5U	5U	5U
Trichloroethane	5U	5U	5U	5U	5U	5U	5U
Toluene	5U	5U	5U	5U	5U	5U	5U
Vinyl acetate	10U	10U	10U	10U	10U	10U	10U
Vinyl chloride	10U	10U	10U	10U	10U	10U	10U
Total Xylenes	5U	5U	5U	5U	5U	5U	5U

Table G.16 (Continued)
Summary of Volatile Organic Compounds Detected in Water Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

VOC	Matrix:	05-003MW A	05-003MW B	BG-001MW	05-001MW	05-002MW	05-003MW
		08/11/94 941987-0002	08/11/94 941987-0003	12/07/94 943126-0001	12/07/94 943126-0009	12/07/94 943126-0010	12/07/94 943126-0008
		Water	Water	Water	Water	Water	Water
Acetone	Bromodichloromethane	10U	10U	10U	10U	50U	10U
Benzene		5U	5U	5U	5U	25U	5U
Bromodichloromethane		5U	5U	5U	5U	25U	5U
Bromoform		5U	5U	5U	5U	25U	5U
Bromomethane		10U	10U	10U	10U	50U	10U
2-Butanone		10U	10U	10U	10U	50U	10U
Carbon disulfide		5U	5U	5U	5U	25U	5U
Carbon tetrachloride		5U	5U	5U	5U	25U	5U
Chlorobenzene		5U	5U	5U	5U	25U	5U
Chlorodibromomethane		10U	10U	10U	10U	50U	10U
Chloroethane	2-Chloroethylvinyl ether	10U	10U	10U	10U	50U	10U
2-Chloroethylvinyl ether		5U	5U	5U	5U	25U	5U
Chloroform		10U	10U	10U	10U	50U	10U
Chloromethane		5U	5U	5U	5U	25U	5U
1,1-Dichloroethane		5U	5U	5U	5U	25U	5U
1,2-Dichloroethane		5U	5U	5U	5U	25U	5U
1,1-Dichloroethene		5U	5U	5U	5U	25U	5U
Total 1,2-Dichloroethenes		5U	5U	5U	5U	25U	5U
1,2-Dichloropropane		5U	5U	5U	5U	25U	5U
cis-1,3-Dichloropropene		5U	5U	5U	5U	25U	5U
trans-1,3-Dichloropropene	Ethylbenzene	5U	5U	5U	5U	25U	5U
Ethylbenzene		5U	5U	5U	5U	25U	5U
2-Hexanone		10U	10U	10U	10U	50U	10U
Methylene Chloride		5U	5U	5U	5U	25U	5U
4-Methyl-2-pentanone		10U	10U	10U	10U	50U	10U
Styrene		5U	5U	5U	5U	25U	5U
1,1,2,2-Tetrachloroethane		5U	5U	5U	5U	25U	5U

Table G.16 (Continued)
Summary of Volatile Organic Compounds Detected in Water Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

VOC	Matrix:	Location: Sample Date: Lab Sample No.:	05-003MW A 08/11/94 941987-0002	05-003MW B 08/11/94 941987-0003	BG-001MW 12/07/94 943126-0001	05-001MW 12/07/94 943126-0009	05-002MW 12/07/94 943126-0010	05-003MW 12/07/94 943126-0008
			Water	Water	Water	Water	Water	Water
Tetrachloroethane			5U	5U	5U	5U	25U	5U
1,1,1-Trichloroethane			5U	5U	5U	5U	25U	5U
1,1,2-Trichloroethane			5U	5U	5U	5U	25U	5U
Trichloroethane			5U	5U	5U	5U	25U	5U
Toluene			5U	5U	5U	5U	25U	5U
Vinyl acetate			10U	10U	10U	10U	50U	10U
Vinyl chloride			10U	10U	10U	10U	50U	10U
Total Xylenes			5U	5U	5U	5U	25U	5U
VOC	Matrix:	Location: Sample Date: Lab Sample No.:	05-001MW 12/05/95 953696-0007	05-002MW 12/05/95 953696-0004	05-002MW DUP 12/05/95 953696-0005	05-003MW 12/05/95 953696-0006		
			Water	Water	Water	Water		
Acetone			10U	10U	10U	10U		
Benzene			5U	5U	5U	5U		
Bromodichloromethane			5U	5U	5U	5U		
Bromoform			5U	5U	5U	5U		
Bromomethane			10U	10U	10U	10U		
2-Butanone			10U	10U	10U	10U		
Carbon disulfide			5U	5U	5U	5U		
Carbon tetrachloride			5U	5U	5U	5U		
Chlorobenzene			5U	5U	5U	5U		
Chlorodibromomethane			10U	10U	10U	10U		
Chloroethane			10U	10U	10U	10U		
2-Chloroethylvinyl ether			5U	5U	5U	5U		

Table G.16 (Concluded)
Summary of Volatile Organic Compounds Detected in Water Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

Location: Sample Date: Lab Sample No.:		05-001MW 12/05/95 953696-0007	05-002MW 12/05/95 953696-004	05-002MW DUP 12/05/95 953696-0005	05-003MW 12/05/95 953696-0006
VOC	Matrix:	Water	Water	Water	Water
Chloroform	Chloromethane 1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethene Total 1,2-Dichloroethenes 1,2-Dichloropropane cis-1,3-Dichloropropene trans-1,3-Dichloropropene Ethylbenzene 2-Hexanone Methylene Chloride 4-Methyl-2-pentanone Styrene 1,1,2,2-Tetrachloroethane Tetrachloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethane Toluene Vinyl acetate Vinyl chloride Total Xylenes	10U	10U	10U	10U
Chloromethane		5U	5U	5U	5U
1,1-Dichloroethane		5U	5U	5U	5U
1,2-Dichloroethane		5U	5U	5U	5U
1,1-Dichloroethene		5U	5U	5U	5U
Total 1,2-Dichloroethenes		5U	5U	5U	5U
1,2-Dichloropropane		5U	5U	5U	5U
cis-1,3-Dichloropropene		5U	5U	5U	5U
trans-1,3-Dichloropropene		5U	5U	5U	5U
Ethylbenzene		5U	5U	5U	5U
2-Hexanone		10U	10U	10U	10U
Methylene Chloride		5U	5U	5U	5U
4-Methyl-2-pentanone		10U	10U	10U	10U
Styrene		5U	5U	5U	5U
1,1,2,2-Tetrachloroethane		5U	5U	5U	5U
Tetrachloroethane		5U	5U	5U	5U
1,1,1-Trichloroethane		5U	5U	5U	5U
1,1,2-Trichloroethane		5U	5U	5U	5U
Trichloroethane		5U	5U	5U	5U
Toluene		5U	5U	5U	5U
Vinyl acetate	10U	10U	10U	10U	
Vinyl chloride	10U	10U	10U	10U	
Total Xylenes	5U	5U	5U	5U	

BG -- Background.
 MW -- Monitoring Well.
 VOC -- Volatile Organic Compounds.
 U -- Compound analyzed for but not detected. Number indicates the detection limit.

Table G.17
Summary of TPH Compounds Detected in Water Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California

(Results in micrograms per kilogram for soil or micrograms per liter for water unless otherwise noted.)

Location: Sample Date: Lab Sample No.:	BG-001MW A 08/10/94 941979-0003	BG-001MW B 08/10/94 941979-0006	05-001MW A 08/09/94 941966-0001	05-001MW B 08/09/94 941966-0003	05-002MW A 08/11/94 941987-0004	05-002MW B 08/11/94 941987-0005
TPH Matrix:	Water	Water	Water	Water	Water	Water
Diesel	10U	10U	10U	10U	10U	10U
Gasoline (ug/L)	100U	250	550	160	1,200	1,100
Location: Sample Date: Lab Sample No.:	05-003MW A 08/11/94 941987-0002	05-003MW B 08/11/94 941987-0003	BG-001MW 12/07/94 943126-0001	05-001MW 12/07/94 943126-0009	05-002MW 12/07/94 943126-0010	05-003MW 12/07/94 943126-0008
TPH Matrix:	Water	Water	Water	Water	Water	Water
Diesel	10U	10U	50U	.050U	.980	.050U
Gasoline (ug/L)	100U	100U	190	100U	770	100U
Location: Sample Date: Lab Sample No.:	05-001MW 12/05/95 953696-0007	05-002MW 12/05/95 953696-0004	05-002MW DUP 12/05/95 953696-0005	05-003MW 12/05/95 953696-0005		
TPH Matrix:	Water	Water	Water	Water		
Diesel	10U	10U	10U	10U		
Gasoline (ug/L)	50U	1,300	300	50U		

BG - Background.

MW - Monitoring Well.

TPH - Total Petroleum Hydrocarbons.

U - Compound analyzed for but not detected. Number indicates the detection limit.

Table G.18
Summary of Lead Detected in Water Samples
216th EIS and 234th CCSQ, Hayward ANG, Hayward, California
 (Results in milligrams per kilogram for soil or milligrams per liter for water unless otherwise noted.)

Location: Sample Date: Lab Sample No.:	BG-001MW A 08/10/94 941979-0003	BG-001MW B 08/10/94 941979-0006	05-001MW A 08/09/94 941966-0001	05-001MW B 08/09/94 941966-0003	05-002MW A 08/11/94 941987-0004	05-002MW B 08/11/94 941987-0005
Metal	Water	Water	Water	Water	Water	Water
Lead	1.0U	1.0U	0.005U	0.005U	1.0U	1.0U
Location: Sample Date: Lab Sample No.:	05-003MW A 08/11/94 941987-0002	05-003MW B 08/11/94 941987-0003	BG-001MW 12/07/94 943126-0001	05-001MW 12/07/94 943126-0009	05-002MW 12/07/94 943126-0010	05-003MW 12/07/94 943126-0008
Metal	Water	Water	Water	Water	Water	Water
Lead	1.0U	1.0U	0.050U	0.050U	0.050U	0.050U
Location: Sample Date: Lab Sample No.:	05-003MW A 08/11/94 941987-0002	05-003MW B 08/11/94 941987-0003	BG-001MW 12/07/94 943126-0001	05-001MW 12/07/94 943126-0009		
Metal	Water	Water	Water	Water		
Lead	.005U	.005U	.005U	.005U		

BG - Background.
 MW - Monitoring Well.

U - Compound analyzed for but not detected. Number indicates the detection limit.

Core Laboratories

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ANALYTICAL REPORT

Job Number: 941849

Prepared For:

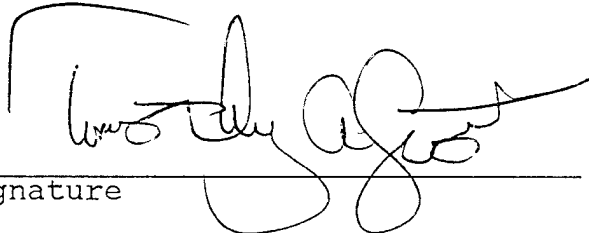
Operational Technologies

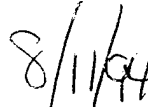
John Morris

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Date: 08/09/94


Signature


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**CA. E. L. A. P. 1174
L. A. C. S. D. 10146**

Core Laboratories

Case Narrative

Job Number 941849

EPA METHOD 8240

Your samples were analyzed for volatile organics by EPA method 8240.

Initial and continuing calibrations met EPA method 8240 acceptance criteria for all SPCC and CCC compounds.

One method blank was analyzed with your samples and met EPA method 8240 acceptance criteria for contamination and surrogate recovery.

Surrogate recoveries met EPA method 8240 acceptance criteria in all samples and spikes with the following exceptions:
Samples 941849-4 and 941849-7 had one surrogate, toluene-d8, with a slightly high recovery.

Sample 941849-14 was designated in this batch to be used for matrix spike and 941849-15 for spike duplicate analysis.

Core Laboratories

Case Narrative

Job Number 941849

EPA METHOD 8015

Your samples were analyzed for gasoline and diesel by modified EPA method 8015.

Initial and continuing calibrations met EPA method 8015 acceptance criteria.

The method blanks analyzed with your samples met EPA method 8015 acceptance criteria for contamination.

Sample 941849-14 was designated in this batch to be used for matrix spike and 941849-15 for spike duplicate analysis.

Core Laboratories**CASE NARRATIVE**

Job Number 914849

Lead Analysis

The lead analyses on soils was performed by EPA 6010 instead of EPA 7420. The lead analyses on waters was performed by EPA 6020 instead of EPA 7420.

Samples 941849-14 and 15 were designated in this sample delivery group as an MS/MSD pair.

All calibration and QC criteria were met.

Core Laboratories
LABORATORY TESTS RESULTS
08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0001

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 10:05

TIME RECEIVED: 10:30

WORK DESCRIPTION: 04-002BH 1'

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/01/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	85	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	111	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	86	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/05/94	RVJ

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LABORATORY TESTS RESULTS 08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0001

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 10:05

TIME RECEIVED: 10:30

WORK DESCRIPTION: 04-002BH 1'

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel ✓	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline ✓	<500	500	ug/kg	EPA 8015 (modified)	08/03/94	RVJ
Lead (Pb) ✓	11	5.0	mg/kg	EPA 6010	08/03/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/05/94	DC

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LABORATORY TESTS RESULTS
08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

TEST I.D.: Hayward ANG 1315-115
DATE SAMPLED: 07/28/94
TIME SAMPLED: 10:10
WORK DESCRIPTION: 04-002BH 6'

LABORATORY I.D.: 941849-0002
DATE RECEIVED: 07/29/94
TIME RECEIVED: 10:30
REMARKS: 2 brssl-v-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/01/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	82	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	106	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	87	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/05/94	RVJ

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LABORATORY TESTS RESULTS
08/09/94

JOB NUMBER: 941849 CUSTOMER: Operational Technologies ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
DATE SAMPLED: 07/28/94
TIME SAMPLED: 10:10
WORK DESCRIPTION: 04-002BH 6'

LABORATORY I.D.: 941849-0002
DATE RECEIVED: 07/29/94
TIME RECEIVED: 10:30
REMARKS: 2 brssl-v-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel ✓	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline ✓	<500	500	ug/kg	EPA 8015 (modified)	08/03/94	RVJ
Lead (Pb) ✓	10	5.0	mg/kg	EPA 6010	08/03/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/05/94	DC

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LABORATORY TESTS RESULTS
08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0003

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 10:20

TIME RECEIVED: 10:30

WORK DESCRIPTION: 04-002BH 11'

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	----	N/A	EPA 3050	08/01/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	82	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	104	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	90	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/05/94	RVJ

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LABORATORY TESTS RESULTS 08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 07/28/94

TIME SAMPLED: 10:20

WORK DESCRIPTION: 04-002BH 11'

LABORATORY I.D.: 941849-0003

DATE RECEIVED: 07/29/94

TIME RECEIVED: 10:30

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel ✓	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline ✓	<500	500	ug/kg	EPA 8015 (modified)	08/03/94	RVJ
Lead (Pb) ✓	<5.0	5.0	mg/kg	EPA 6010	08/03/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/05/94	DC

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LABORATORY TESTS RESULTS 08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

TEST I.D.: Hayward ANG 1315-115
 DATE SAMPLED: 07/28/94
 TIME SAMPLED: 12:02
 WORK DESCRIPTION: 04-001BH 1'

LABORATORY I.D.: 941849-0004
 DATE RECEIVED: 07/29/94
 TIME RECEIVED: 10:30
 REMARKS: 2 brssl-v-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/01/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	82	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	121(a)	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	84	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/07/94	RVJ

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LABORATORY TESTS RESULTS 08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0004

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 12:02

TIME RECEIVED: 10:30

WORK DESCRIPTION: 04-001BH 1'

REMARKS: 2 brssl-v-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel ✓	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline ✓	<500	500	ug/kg	EPA 8015 (modified)	08/03/94	RVJ
Lead (Pb) ✓	210	5.0	mg/kg	EPA 6010	08/03/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/05/94	DC

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LABORATORY TESTS RESULTS
08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 07/28/94

TIME SAMPLED: 12:15

WORK DESCRIPTION: 04-001BH 11'

LABORATORY I.D.: 941849-0005

DATE RECEIVED: 07/29/94

TIME RECEIVED: 10:30

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/01/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	14	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	83	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	104	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	94	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/05/94	RVJ

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LABORATORY TESTS RESULTS 08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0005

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 12:15

TIME RECEIVED: 10:30

WORK DESCRIPTION: 04-001BH 11'

REMARKS: 2 brssl-v-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<500	500	ug/kg	EPA 8015 (modified)	08/03/94	RVJ
Lead (Pb)	7.3	5.0	mg/kg	EPA 6010	08/03/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/05/94	DC

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LABORATORY TESTS RESULTS 08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 07/28/94

TIME SAMPLED: 12:35

WORK DESCRIPTION: 04-001BH 21'

LABORATORY I.D.: 941849-0006

DATE RECEIVED: 07/29/94

TIME RECEIVED: 10:30

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/01/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	88	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	104	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	98	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/05/94	RVJ

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LABORATORY TESTS RESULTS 08/09/94

JOB NUMBER: 941849 CUSTOMER: Operational Technologies ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
DATE SAMPLED: 07/28/94
TIME SAMPLED: 12:35
WORK DESCRIPTION: 04-001BH 21'

LABORATORY I.D.: 941849-0006
DATE RECEIVED: 07/29/94
TIME RECEIVED: 10:30
REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<500	500	ug/kg	EPA 8015 (modified)	08/03/94	RVJ
Lead (Pb)	8.3	5.0	mg/kg	EPA 6010	08/03/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/05/94	DC

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LABORATORY TESTS RESULTS

08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

VENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 07/28/94

TIME SAMPLED: 13:12

WORK DESCRIPTION: 04-0038H 1'

LABORATORY I.D.: 941849-0007

DATE RECEIVED: 07/29/94

TIME RECEIVED: 10:30

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/01/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	6	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	102	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	112(a)	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	82	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/07/94	RVJ

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LABORATORY TESTS RESULTS 08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0007

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 13:12

TIME RECEIVED: 10:30

WORK DESCRIPTION: 04-003BH 1'

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<500	500	ug/kg	EPA 8015 (modified)	08/03/94	RVJ
Lead (Pb)	59	5.0	mg/kg	EPA 6010	08/03/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/05/94	DC

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LABORATORY TESTS RESULTS
08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0008

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 13:15

TIME RECEIVED: 10:30

WORK DESCRIPTION: 04-003BH 6'

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/01/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	6	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	112	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	104	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	98	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/05/94	RVJ

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LABORATORY TESTS RESULTS

08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 07/28/94

TIME SAMPLED: 13:15

WORK DESCRIPTION: 04-003BH 6'

LABORATORY I.D.: 941849-0008

DATE RECEIVED: 07/29/94

TIME RECEIVED: 10:30

REMARKS: 2 brssl-v-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<500	500	ug/kg	EPA 8015 (modified)	08/04/94	RVJ
Lead (Pb)	11	5.0	mg/kg	EPA 6010	08/03/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/05/94	DC

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LABORATORY TESTS RESULTS
08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
DATE SAMPLED: 07/28/94
TIME SAMPLED: 13:18
WORK DESCRIPTION: 04-003BH 11'

LABORATORY I.D.: 941849-0009
DATE RECEIVED: 07/29/94
TIME RECEIVED: 10:30
REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/01/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	104	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	104	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	94	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/05/94	RVJ

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LABORATORY TESTS RESULTS

08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0009

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 13:18

TIME RECEIVED: 10:30

WORK DESCRIPTION: 04-003BH 11'

REMARKS: 2 brssl-v-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<500	500	ug/kg	EPA 8015 (modified)	08/04/94	RVJ
Lead (Pb)	8.6	5.0	mg/kg	EPA 6010	08/03/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/05/94	DC

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LABORATORY TESTS RESULTS
08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 07/28/94

TIME SAMPLED: 14:47

WORK DESCRIPTION: 04-004BH 1.5'

LABORATORY I.D.: 941849-0010

DATE RECEIVED: 07/29/94

TIME RECEIVED: 10:30

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/01/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	5	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	105	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	106	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	88	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/05/94	RVJ

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LABORATORY TESTS RESULTS 08/09/94

JOB NUMBER: 941849 CUSTOMER: Operational Technologies ATTN: John Morris

CLIENT I.D.....: Hayward ANG 1315-115
DATE SAMPLED.....: 07/28/94
TIME SAMPLED.....: 14:47
WORK DESCRIPTION...: 04-0048H 1.5'

LABORATORY I.D....: 941849-0010
DATE RECEIVED.....: 07/29/94
TIME RECEIVED.....: 10:30
REMARKS.....: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<500	500	ug/kg	EPA 8015 (modified)	08/04/94	RVJ
Lead (Pb)	590	5.0	mg/kg	EPA 6010	08/03/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/05/94	DC

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LABORATORY TESTS RESULTS 08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 07/28/94

TIME SAMPLED: 14:50

WORK DESCRIPTION: 04-004BH 1.5' DUP

LABORATORY I.D.: 941849-0011

DATE RECEIVED: 07/29/94

TIME RECEIVED: 10:30

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/01/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	104	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	110	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	86	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/05/94	RVJ

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LABORATORY TESTS RESULTS 08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0011

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 14:50

TIME RECEIVED: 10:30

WORK DESCRIPTION: 04-004BH 1.5' DUP

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<500	500	ug/kg	EPA 8015 (modified)	08/04/94	RVJ
Lead (Pb)	20	5.0	mg/kg	EPA 6010	08/03/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/05/94	DC

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LABORATORY TESTS RESULTS
08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0012

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 15:30

TIME RECEIVED: 10:30

WORK DESCRIPTION: 04-004BH 6'

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/01/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	102	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	100	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	90	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/05/94	RVJ

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LABORATORY TESTS RESULTS 08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0012

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 15:30

TIME RECEIVED: 10:30

WORK DESCRIPTION: 04-004BH 6'

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<500	500	ug/kg	EPA 8015 (modified)	08/04/94	RVJ
Lead (Pb)	15	5.0	mg/kg	EPA 6010	08/03/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/05/94	DC

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LABORATORY TESTS RESULTS

08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0013

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 15:40

TIME RECEIVED: 10:30

WORK DESCRIPTION: 04-004BH 7'

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/01/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	99	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	100	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	95	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/05/94	RVJ

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LABORATORY TESTS RESULTS 08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0013

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 15:40

TIME RECEIVED: 10:30

WORK DESCRIPTION: 04-004BH 7'

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<500	500	ug/kg	EPA 8015 (modified)	08/04/94	RVJ
Lead (Pb)	14	5.0	mg/kg	EPA 6010	08/03/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/05/94	DC

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LABORATORY TESTS RESULTS
08/09/94

B NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
DATE SAMPLED: 07/28/94
TIME SAMPLED: 15:40
WORK DESCRIPTION: 04-004BH 7' MS

LABORATORY I.D.: 941849-0014
DATE RECEIVED: 07/29/94
TIME RECEIVED: 10:30
REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/01/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	60	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	58	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	74	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	58	5	ug/kg	EPA 8240		
Toluene	59	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	105	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	102	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	95	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/05/94	RVJ

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LABORATORY TESTS RESULTS 08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 07/28/94

TIME SAMPLED: 15:40

WORK DESCRIPTION: 04-004BH 7' MS

LABORATORY I.D.: 941849-0014

DATE RECEIVED: 07/29/94

TIME RECEIVED: 10:30

REMARKS: 2 brssl-v-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	510	10	mg/kg	EPA 8015 (modified)		
Gasoline	1000	500	ug/kg	EPA 8015 (modified)	08/04/94	RVJ
Lead (Pb)	98	5.0	mg/kg	EPA 6010	08/03/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/05/94	DC

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LABORATORY TESTS RESULTS
08/09/94

NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0015

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 15:40

TIME RECEIVED: 10:30

WORK DESCRIPTION: 04-004BH 7' MSD

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/01/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	64	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	60	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	76	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	61	5	ug/kg	EPA 8240		
Toluene	61	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	102	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	100	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	94	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/05/94	RVJ

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LABORATORY TESTS RESULTS 08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0015

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 15:40

TIME RECEIVED: 10:30

WORK DESCRIPTION: 04-004BH 7' MSD

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel ✓	520	10	mg/kg	EPA 8015 (modified)		
Gasoline ✓	1000	500	ug/kg	EPA 8015 (modified)	08/04/94	RVJ
Lead (Pb) ✓	90	5.0	mg/kg	EPA 6010	08/03/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/05/94	DC

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LABORATORY TESTS RESULTS

08/09/94

NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
 DATE SAMPLED: 07/28/94
 TIME SAMPLED: 16:10
 WORK DESCRIPTION: 04-004BH 11.5'

LABORATORY I.D.: 941849-0016
 DATE RECEIVED: 07/29/94
 TIME RECEIVED: 10:30
 REMARKS: 2 brssl-v-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/01/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	6	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	101	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	101	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	93	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/05/94	RVJ

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LABORATORY TESTS RESULTS

08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.....: Hayward ANG 1315-115

LABORATORY I.D....: 941849-0016

DATE SAMPLED.....: 07/28/94

DATE RECEIVED.....: 07/29/94

TIME SAMPLED.....: 16:10

TIME RECEIVED.....: 10:30

WORK DESCRIPTION....: 04-004BH 11.5'

REMARKS.....: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<500	500	ug/kg	EPA 8015 (modified)	08/04/94	RVJ
Lead (Pb)	<5.0	5.0	mg/kg	EPA 6010	08/03/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/05/94	DC

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LABORATORY TESTS RESULTS
08/09/94

NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0017

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 16:13

TIME RECEIVED: 10:30

WORK DESCRIPTION: 04-004BH 11.5' DUP

REMARKS: 2 brssl-v-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/01/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	5	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	104	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	100	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	94	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/05/94	RVJ

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LABORATORY TESTS RESULTS 08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0017

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 16:13

TIME RECEIVED: 10:30

WORK DESCRIPTION: 04-004BH 11.5' DUP

REMARKS: 2 brssl-v-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel ✓	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline ✓	<500	500	ug/kg	EPA 8015 (modified)	08/04/94	RVJ
Lead (Pb) ✓	<5.0	5.0	mg/kg	EPA 6010	08/03/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/05/94	DC

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LABORATORY TESTS RESULTS

08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0018

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 14:34

TIME RECEIVED: 10:30

WORK DESCRIPTION: EB-1

REMARKS: 1 .5LP-/3 voas-equip blank one

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	13	10	ug/L	EPA 8240		
Benzene	ND	5	ug/L	EPA 8240		
Bromodichloromethane	ND	5	ug/L	EPA 8240		
Bromoform	ND	5	ug/L	EPA 8240		
Bromomethane	ND	10	ug/L	EPA 8240		
2-Butanone	ND	10	ug/L	EPA 8240		
Carbon disulfide	ND	5	ug/L	EPA 8240		
Carbon tetrachloride	ND	5	ug/L	EPA 8240		
Chlorobenzene	ND	5	ug/L	EPA 8240		
Chlorodibromomethane	ND	5	ug/L	EPA 8240		
Chloroethane	ND	10	ug/L	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 8240		
Chloroform	ND	5	ug/L	EPA 8240		
Chloromethane	ND	10	ug/L	EPA 8240		
1,1-Dichloroethane	ND	5	ug/L	EPA 8240		
1,2-Dichloroethane	ND	5	ug/L	EPA 8240		
1,1-Dichloroethene	ND	5	ug/L	EPA 8240		
trans-1,2-Dichloroethene	ND	5	ug/L	EPA 8240		
1,2-Dichloropropane	ND	5	ug/L	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
Ethylbenzene	ND	5	ug/L	EPA 8240		
2-Hexanone	ND	10	ug/L	EPA 8240		
Methylene Chloride	ND	5	ug/L	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 8240		
Styrene	ND	5	ug/L	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 8240		
Tetrachloroethene	ND	5	ug/L	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 8240		
Trichloroethene	ND	5	ug/L	EPA 8240		
Toluene	ND	5	ug/L	EPA 8240		
Vinyl acetate	ND	10	ug/L	EPA 8240		
Vinyl chloride	ND	10	ug/L	EPA 8240		
Total Xylenes	ND	5	ug/L	EPA 8240		
d4-Dichloroethane (SURROGATE)	86	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	100	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	100	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/05/94	RVJ
Diesel	ND	10	mg/L	EPA 8015 (modified)		

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LABORATORY TESTS RESULTS 08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0018

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 14:34

TIME RECEIVED: 10:30

WORK DESCRIPTION: EB-1

REMARKS: 1 .5LP-/3 voas-equip blank one

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Gasoline ✓	<100	100	ug/L	EPA 8015 (modified)	08/02/94	RVJ
Lead (Pb) ✓	<0.005	0.005	mg/L	EPA 6020	08/04/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/05/94	RVJ

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LABORATORY TESTS RESULTS
08/09/94

NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
DATE SAMPLED: 07/28/94
TIME SAMPLED: 15:36
WORK DESCRIPTION: EB-2

LABORATORY I.D.: 941849-0019
DATE RECEIVED: 07/29/94
TIME RECEIVED: 10:30
REMARKS: 1 .5LP-/3 voas-equip blank two

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	ND	10	ug/L	EPA 8240		
Benzene	ND	5	ug/L	EPA 8240		
Bromodichloromethane	ND	5	ug/L	EPA 8240		
Bromoform	ND	5	ug/L	EPA 8240		
Bromomethane	ND	10	ug/L	EPA 8240		
2-Butanone	ND	10	ug/L	EPA 8240		
Carbon disulfide	ND	5	ug/L	EPA 8240		
Carbon tetrachloride	ND	5	ug/L	EPA 8240		
Chlorobenzene	ND	5	ug/L	EPA 8240		
Chlorodibromomethane	ND	5	ug/L	EPA 8240		
Chloroethane	ND	10	ug/L	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 8240		
Chloroform	ND	5	ug/L	EPA 8240		
Chloromethane	ND	10	ug/L	EPA 8240		
1,1-Dichloroethane	ND	5	ug/L	EPA 8240		
1,2-Dichloroethane	ND	5	ug/L	EPA 8240		
1,1-Dichloroethene	ND	5	ug/L	EPA 8240		
trans-1,2-Dichloroethene	ND	5	ug/L	EPA 8240		
1,2-Dichloropropane	ND	5	ug/L	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
Ethylbenzene	ND	5	ug/L	EPA 8240		
2-Hexanone	ND	10	ug/L	EPA 8240		
Methylene Chloride	ND	5	ug/L	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 8240		
Styrene	ND	5	ug/L	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 8240		
Tetrachloroethene	ND	5	ug/L	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 8240		
Trichloroethene	ND	5	ug/L	EPA 8240		
Toluene	ND	5	ug/L	EPA 8240		
Vinyl acetate	ND	10	ug/L	EPA 8240		
Vinyl chloride	ND	10	ug/L	EPA 8240		
Total Xylenes	ND	5	ug/L	EPA 8240		
d4-Dichloroethane (SURROGATE)	88	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	102	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	100	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/05/94	RVJ
Diesel	ND	10	mg/L	EPA 8015 (modified)		

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LABORATORY TESTS RESULTS 08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0019

DATE SAMPLED: 07/28/94

DATE RECEIVED: 07/29/94

TIME SAMPLED: 15:36

TIME RECEIVED: 10:30

WORK DESCRIPTION: EB-2

REMARKS: 1 .5LP-/3 voas-equip blank two

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Gasoline ✓	<100	100	ug/L	EPA 8015 (modified)	08/02/94	RVJ
Lead (Pb) ✓	<0.005	0.005	mg/L	EPA 6020	08/04/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/05/94	RVJ

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LABORATORY TESTS RESULTS

08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0020

DATE SAMPLED: 07/22/94

DATE RECEIVED: 07/29/94

TIME SAMPLED:

TIME RECEIVED: 10:30

WORK DESCRIPTION: TRIP BLANK w/ EB-1

REMARKS: 1 vial-CORE DI H2O w/EB-1

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	ND	10	ug/L	EPA 8240		
Benzene	ND	5	ug/L	EPA 8240		
Bromodichloromethane	ND	5	ug/L	EPA 8240		
Bromoform	ND	5	ug/L	EPA 8240		
Bromomethane	ND	10	ug/L	EPA 8240		
2-Butanone	ND	10	ug/L	EPA 8240		
Carbon disulfide	ND	5	ug/L	EPA 8240		
Carbon tetrachloride	ND	5	ug/L	EPA 8240		
Chlorobenzene	ND	5	ug/L	EPA 8240		
Chlorodibromomethane	ND	5	ug/L	EPA 8240		
Chloroethane	ND	10	ug/L	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 8240		
Chloroform	ND	5	ug/L	EPA 8240		
Chloromethane	ND	10	ug/L	EPA 8240		
1,1-Dichloroethane	ND	5	ug/L	EPA 8240		
1,2-Dichloroethane	ND	5	ug/L	EPA 8240		
1,1-Dichloroethene	ND	5	ug/L	EPA 8240		
trans-1,2-Dichloroethene	ND	5	ug/L	EPA 8240		
1,2-Dichloropropane	ND	5	ug/L	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
Ethylbenzene	ND	5	ug/L	EPA 8240		
2-Hexanone	ND	10	ug/L	EPA 8240		
Methylene Chloride	ND	5	ug/L	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 8240		
Styrene	ND	5	ug/L	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 8240		
Tetrachloroethene	ND	5	ug/L	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 8240		
Trichloroethene	ND	5	ug/L	EPA 8240		
Toluene	ND	5	ug/L	EPA 8240		
Vinyl acetate	ND	10	ug/L	EPA 8240		
Vinyl chloride	ND	10	ug/L	EPA 8240		
Total Xylenes	ND	5	ug/L	EPA 8240		
d4-Dichloroethane (SURROGATE)	86	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	103	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	98	0	% Recovery	86-115% QC LIMITS		

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LABORATORY TESTS RESULTS 08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941849-0021

DATE SAMPLED: 07/22/94

DATE RECEIVED: 07/29/94

TIME SAMPLED:

TIME RECEIVED: 10:30

WORK DESCRIPTION: TRIP BLANK w/ EB-2

REMARKS: 1 vial-CORE DI H2O w/EB-2

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 8240	08/03/94	CIS
Acetone	ND	10	ug/L	EPA 8240		
Benzene	ND	5	ug/L	EPA 8240		
Bromodichloromethane	ND	5	ug/L	EPA 8240		
Bromoform	ND	5	ug/L	EPA 8240		
Bromomethane	ND	10	ug/L	EPA 8240		
2-Butanone	ND	10	ug/L	EPA 8240		
Carbon disulfide	ND	5	ug/L	EPA 8240		
Carbon tetrachloride	ND	5	ug/L	EPA 8240		
Chlorobenzene	ND	5	ug/L	EPA 8240		
Chlorodibromomethane	ND	5	ug/L	EPA 8240		
Chloroethane	ND	10	ug/L	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 8240		
Chloroform	ND	5	ug/L	EPA 8240		
Chloromethane	ND	10	ug/L	EPA 8240		
1,1-Dichloroethane	ND	5	ug/L	EPA 8240		
1,2-Dichloroethane	ND	5	ug/L	EPA 8240		
1,1-Dichloroethene	ND	5	ug/L	EPA 8240		
trans-1,2-Dichloroethene	ND	5	ug/L	EPA 8240		
1,2-Dichloropropane	ND	5	ug/L	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
Ethylbenzene	ND	5	ug/L	EPA 8240		
2-Hexanone	ND	10	ug/L	EPA 8240		
Methylene Chloride	ND	5	ug/L	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 8240		
Styrene	ND	5	ug/L	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 8240		
Tetrachloroethene	ND	5	ug/L	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 8240		
Trichloroethene	ND	5	ug/L	EPA 8240		
Toluene	ND	5	ug/L	EPA 8240		
Vinyl acetate	ND	10	ug/L	EPA 8240		
Vinyl chloride	ND	10	ug/L	EPA 8240		
Total Xylenes	ND	5	ug/L	EPA 8240		
d4-Dichloroethane (SURROGATE)	86	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	104	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	102	0	% Recovery	86-115% QC LIMITS		

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Core Laboratories
QUALITY ASSURANCE REPORT
08/09/94

NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY

PARAMETER: Gasoline DATE/TIME ANALYZED: 08/02/94 00:00 QC BATCH NUMBER: 936514
REPORTING LIMIT/DF: 100 UNITS: ug/L METHOD REFERENCE : EPA 8015 (modified) TECHNICIAN: RVJ

BLANK	METHOD	MB080294	<100							
SPIKE	BLANK	072594-0	970					0	1000	97
SPIKE	BLANK DUP	072594-0	1000					0	1000	100

PARAMETER: Gasoline DATE/TIME ANALYZED: 08/03/94 00:00 QC BATCH NUMBER: 936521
REPORTING LIMIT/DF: 500 UNITS: ug/kg METHOD REFERENCE : EPA 8015 (modified) TECHNICIAN: RVJ

BLANK	METHOD	MB080394	<500							
SPIKE	BLANK	080294-0	1000					0	1000	100
SPIKE	BLANK DUP	080294-0	1100					0	1000	110

PARAMETER: Gasoline DATE/TIME ANALYZED: 08/04/94 00:00 QC BATCH NUMBER: 936544
REPORTING LIMIT/DF: 500 UNITS: ug/kg METHOD REFERENCE : EPA 8015 (modified) TECHNICIAN: RVJ

BLANK	METHOD	MB080494	<500							
SPIKE	MATRIX	941849-14	1000					0	1000	100
SPIKE	MATRIX DUP	941849-15	1000					0	1000	100

PARAMETER: Lead (Pb) DATE/TIME ANALYZED: 08/04/94 10:10 QC BATCH NUMBER: 936583
REPORTING LIMIT/DF: 0.005 UNITS: mg/L METHOD REFERENCE : EPA 6020 TECHNICIAN: VB

BLANK	ICB	1B080494	<0.005							
BLANK	CCB	CB080494	<0.005							
STANDARD	ICVS	M94291	0.49			0.50	98			
STANDARD	CCVS	M94294	1.0			1.0	100			
SPIKE	MATRIX	941872-24	0.49					0	0.50	98
DUPLICATE	MS/MSD	941872-24	0.49	0.48	2					

PARAMETER: Lead (Pb) DATE/TIME ANALYZED: 08/03/94 15:48 QC BATCH NUMBER: 936632
REPORTING LIMIT/DF: 0.050 UNITS: mg/L METHOD REFERENCE : EPA 6010 TECHNICIAN: VB

BLANK	ICB	080394BLK	<0.050							
BLANK	CCB	080394	<0.050							
BLANK	MB	080294	<0.050							
BLANK	CCB	080394	<0.050							
STANDARD	ICV	M94267	1.04			1.00	104			
STANDARD	LCS	080294LCS	1.04			1.00	104			
STANDARD	CCV	M94267	1.05			1.00	105			
STANDARD	CCV	M94267	0.915			1.00	92			
STANDARD	CCV	M94267	1.10			1.00	110			
SPIKE	MATRIX	941849-14	98.5					13.8	100	85
SPIKE	MATRIX	941849-15	90.2					13.8	100	76
SPIKE	MATRIX	941849-17	0.459					0	0.500	92
SPIKE	MATRIX	941870-1	0.944					0	1.00	85
DUPLICATE	MATRIX	941870-1	0.096	0.091	0.005			0.096		
DUPLICATE	MATRIX	941870-17	<0.050	<0.050	NC					

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QUALITY ASSURANCE REPORT
08/09/94

B NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

Total Petroleum Hydrocarbons

DATE ANALYZED: 08/05/94 TIME ANALYZED: 00:00 METHOD: EPA 8015 (modified) QC NUMBER:936601

B L A N K S

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Diesel	METHOD	MB080594	1	<10	10	mg/L

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QUALITY ASSURANCE REPORT
08/09/94

JOB NUMBER: 941849

CUSTOMER: Operational Technologies

ATTN: John Morris

Total Petroleum Hydrocarbons

DATE ANALYZED: 08/07/94 TIME ANALYZED: 00:00 METHOD: EPA 8015 (modified) QC NUMBER:936603

B L A N K S

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Diesel	METHOD	MB080794	1	<10	10	mg/kg

1250 Gene Autry Way
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Core Laboratories
Q U A L I T Y A S S U R A N C E R E P O R T

EPA Method 8240

JOB NUMBER: 941849

DATE ANALYZED: 8/3/94

B L A N K S

TEST DESCRIPTION	ANALYS.SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Acetone	METHOD	080394	1	ND	10	ug/kg
Benzene	METHOD	080394	1	ND	5	ug/kg
Bromodichloromethane	METHOD	080394	1	ND	5	ug/kg
Bromoform	METHOD	080394	1	ND	5	ug/kg
Bromomethane	METHOD	080394	1	ND	10	ug/kg
2-Butanone	METHOD	080394	1	ND	10	ug/kg
Carbon disulfide	METHOD	080394	1	ND	5	ug/kg
Carbon tetrachloride	METHOD	080394	1	ND	5	ug/kg
Chlorobenzene	METHOD	080394	1	ND	5	ug/kg
Chlorodibromomethane	METHOD	080394	1	ND	5	ug/kg
Chloroethane	METHOD	080394	1	ND	10	ug/kg
2-Chloroethylvinyl ether	METHOD	080394	1	ND	10	ug/kg
Chloroform	METHOD	080394	1	ND	5	ug/kg
Chloromethane	METHOD	080394	1	ND	10	ug/kg
1,1-Dichloroethane	METHOD	080394	1	ND	5	ug/kg
1,2-Dichloroethene	METHOD	080394	1	ND	5	ug/kg
1,1-Dichloroethene	METHOD	080394	1	ND	5	ug/kg
1,2-Dichloroethene (total)	METHOD	080394	1	ND	5	ug/kg
1,2-Dichloropropane	METHOD	080394	1	ND	5	ug/kg
cis-1,3-Dichloropropene	METHOD	080394	1	ND	5	ug/kg
trans-1,3-Dichloropropene	METHOD	080394	1	ND	5	ug/kg
Ethylbenzene	METHOD	080394	1	ND	5	ug/kg
2-Hexanone	METHOD	080394	1	ND	10	ug/kg
Methylene chloride	METHOD	080394	1	ND	5	ug/kg
4-Methyl-2-pentanone	METHOD	080394	1	ND	10	ug/kg
Styrene	METHOD	080394	1	ND	5	ug/kg
1,1,2,2-Tetrachloroethane	METHOD	080394	1	ND	5	ug/kg
Tetrachloroethene	METHOD	080394	1	ND	5	ug/kg
Toluene	METHOD	080394	1	ND	5	ug/kg
1,1,1-Trichloroethane	METHOD	080394	1	ND	5	ug/kg
1,1,2-Trichloroethane	METHOD	080394	1	ND	5	ug/kg
Trichloroethene	METHOD	080394	1	ND	5	ug/kg
Vinyl acetate	METHOD	080394	1	ND	5	ug/kg
Vinyl chloride	METHOD	080394	1	ND	10	ug/kg
Total xylenes	METHOD	080394	1	ND	5	ug/kg
d4-1,2-Dichloroethane (SURROGATE)	METHOD	080394	1	82	76-114	% recovery
d8-Toluene (SURROGATE)	METHOD	080394	1	102	88-110	% recovery
4-Bromofluorobenzene (SURROGATE)	METHOD	080394	1	104	86-115	% recovery

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Core Laboratories
QUALITY ASSURANCE REPORT

EPA Method 8240

JOB NUMBER: 941849

DATE ANALYZED: 8/3/94

MATRIX SPIKES

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	UNITS	PERCENT RECOVERY	RPD	QC LIMITS %REC	RPD
Benzene	MATRIX	941849-14	60	0	50	ug/kg	120	4.9	66-142	21
Chlorobenzene	MATRIX DUP	941849-15	63	0	50	ug/kg	126			
	MATRIX	941849-14	58	0	50	ug/kg	116	1.7	60-133	21
	MATRIX DUP	941849-15	59	0	50	ug/kg	118			
1,1-Dichloroethene	MATRIX	941849-14	74	0	50	ug/kg	148	2.7	59-172	22
	MATRIX DUP	941849-15	76	0	50	ug/kg	152			
Trichloroethene	MATRIX	941849-14	58	0	50	ug/kg	116	5.0	62-137	24
	MATRIX DUP	941849-15	61	0	50	ug/kg	122			
Toluene	MATRIX	941849-14	59	0	50	ug/kg	118	3.3	59-139	21
	MATRIX DUP	941849-15	61	0	50	ug/kg	122			
1,4-Dichloroethane (SURROGATE)	MATRIX	941849-14	53	0	50	ug/kg	106	N/A	70-121	N/A
	MATRIX DUP	941849-15	51	0	50	ug/kg	102			
p8-Toluene (SURROGATE)	MATRIX	941849-14	51	0	50	ug/kg	102	N/A	84-138	N/A
	MATRIX DUP	941849-15	50	0	50	ug/kg	100			
1-Bromofluorobenzene (SURROGATE)	MATRIX	941849-14	47	0	50	ug/kg	94	N/A	59-113	N/A
	MATRIX DUP	941849-15	47	0	50	ug/kg	94			

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Core Laboratories
QUALITY ASSURANCE REPORT

EPA Method 8240

JOB NUMBER: 941849

DATE ANALYZED: 8/3/94

B L A N K S

TEST DESCRIPTION	ANALYS.SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Acetone	METHOD	080394	1	ND	10	ug/L
Benzene	METHOD	080394	1	ND	5	ug/L
Bromodichloromethane	METHOD	080394	1	ND	5	ug/L
Bromoform	METHOD	080394	1	ND	5	ug/L
Bromomethane	METHOD	080394	1	ND	10	ug/L
2-Butanone	METHOD	080394	1	ND	10	ug/L
Carbon disulfide	METHOD	080394	1	ND	5	ug/L
Carbon tetrachloride	METHOD	080394	1	ND	5	ug/L
Chlorobenzene	METHOD	080394	1	ND	5	ug/L
Chlorodibromomethane	METHOD	080394	1	ND	5	ug/L
Chloroethane	METHOD	080394	1	ND	10	ug/L
2-Chloroethylvinyl ether	METHOD	080394	1	ND	10	ug/L
Chloroform	METHOD	080394	1	ND	5	ug/L
Chloromethane	METHOD	080394	1	ND	10	ug/L
1,1-Dichloroethane	METHOD	080394	1	ND	5	ug/L
1,2-Dichloroethene	METHOD	080394	1	ND	5	ug/L
1,1-Dichloroethene	METHOD	080394	1	ND	5	ug/L
1,2-Dichloroethene (total)	METHOD	080394	1	ND	5	ug/L
1,2-Dichloropropane	METHOD	080394	1	ND	5	ug/L
cis-1,3-Dichloropropene	METHOD	080394	1	ND	5	ug/L
trans-1,3-Dichloropropene	METHOD	080394	1	ND	5	ug/L
Ethylbenzene	METHOD	080394	1	ND	5	ug/L
2-Hexanone	METHOD	080394	1	ND	10	ug/L
Methylene chloride	METHOD	080394	1	ND	5	ug/L
4-Methyl-2-pentanone	METHOD	080394	1	ND	10	ug/L
Styrene	METHOD	080394	1	ND	5	ug/L
1,1,2,2-Tetrachloroethane	METHOD	080394	1	ND	5	ug/L
Tetrachloroethene	METHOD	080394	1	ND	5	ug/L
Toluene	METHOD	080394	1	ND	5	ug/L
1,1,1-Trichloroethane	METHOD	080394	1	ND	5	ug/L
1,1,2-Trichloroethane	METHOD	080394	1	ND	5	ug/L
Trichloroethene	METHOD	080394	1	ND	5	ug/L
Vinyl acetate	METHOD	080394	1	ND	5	ug/L
Vinyl chloride	METHOD	080394	1	ND	10	ug/L
Total xylenes	METHOD	080394	1	ND	5	ug/L
d4-1,2-Dichloroethane (SURROGATE)	METHOD	080394	1	82	76-114	% recovery
d8-Toluene (SURROGATE)	METHOD	080394	1	102	88-110	% recovery
4-Bromofluorobenzene (SURROGATE)	METHOD	080394	1	104	86-115	% recovery

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QUALITY ASSURANCE REPORT

PA Method 8240

JOB NUMBER: 941849

DATE ANALYZED: 8/3/94

MATRIX SPIKES

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	UNITS	PERCENT RECOVERY	RPD	QC LIMITS %REC	RPD
Benzene	BLANK	072694	56	0	50	ug/L	112	8.5	76-127	11
	BLANK DUP	072694	61	0	50	ug/L	122			
Chlorobenzene	BLANK	072694	55	0	50	ug/L	110	7.0	75-130	13
	BLANK DUP	072694	59	0	50	ug/L	118			
1,1-Dichloroethene	BLANK	072694	65	0	50	ug/L	130	8.8	61-145	14
	BLANK DUP	072694	71	0	50	ug/L	142			
Dichloroethene	BLANK	072694	55	0	50	ug/L	110	7.0	71-120	14
	BLANK DUP	072694	59	0	50	ug/L	118			
Toluene	BLANK	072694	55	0	50	ug/L	110	5.3	76-125	13
	BLANK DUP	072694	58	0	50	ug/L	116			
1,4-Dichloroethane (SURROGATE)	BLANK	072694	51	0	50	ug/L	102	N/A	76-114	N/A
	BLANK DUP	072694	49	0	50	ug/L	98			
1,3-Toluene (SURROGATE)	BLANK	072694	49	0	50	ug/L	98	N/A	88-110	N/A
	BLANK DUP	072694	49	0	50	ug/L	98			
1,4-Bromofluorobenzene (SURROGATE)	BLANK	072694	52	0	50	ug/L	104	N/A	86-115	N/A
	BLANK DUP	072694	52	0	50	ug/L	104			

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QUALITY ASSURANCE FOOTER

METHOD REFERENCES

- (1) EPA SW-846, Test Methods for Evaluating Solid Waste, Third Edition, November 1990, and July 1992 update
- (2) Standard Methods for the Examination of Water and Wastewater, 17th Edition, 1989
- (3) EPA 600/4-79-020, Methods of Chemical Analysis for Waters and Wastes, March 1983
- (4) Federal Register, Friday, October 26, 1984 (40 CFR Part 136)
- (5) American Society for Testing and Materials, Volumes 5.01, 5.02, 5.03, 1992
- (6) EPA 600/4-89-001, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Fresh Water Organisms
- (7) EPA 600/4-90-027, Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Fresh Water and Marine Organisms, Fourth Edition

COMMENTS

All methods of chemical analysis have a statistical uncertainty associated with the results. Unless otherwise indicated, the data in this report are within the limits of uncertainty as specified in the referenced method. Quality control acceptance criteria are based either on actual laboratory performance or on limits specified in the referenced method. The date and time of analysis indicated on the QA report may not reflect the actual time of analysis for QC samples. All data reported on an "as received" basis unless otherwise indicated. Data reported in the QA report may be lower than sample data due to dilution of samples into the calibration range of the analysis. Sample concentrations for solid samples are calculated on an as received (wet) basis.

FLAGS, FOOTNOTES, AND ABBREVIATIONS (as needed)

- | | |
|--|--|
| NA = Not analyzed | N.I. = Not Ignitable |
| N/A = Not applicable | S.I. = Sustains Ignition |
| ug/L = Micrograms per liter | I(NS) = Ignites, but does not Sustain Ignition |
| mg/L = Milligrams per liter | RPD = Relative Percent Difference |
| ND = Not detected at a value greater than the reporting limit | |
| NC = Not calculable due to values lower than the detection limit | |
| (a) = Surrogate recoveries were outside acceptable ranges due to matrix effects. | |
| (b) = Surrogate recoveries were not calculated due to dilution of the sample below the detectable range for the surrogate. | |
| (c) = Matrix spike recoveries were outside acceptable ranges due to matrix effects. | |
| (d) = Relative Percent Difference (RPD) for duplicate analysis outside acceptance limits due to actual differences in the sample matrix. | |
| (e) = The limit listed for flammability indicates the upper limit for the test. Samples are not tested at temperatures above 140 Fahrenheit since only samples which will sustain ignition at temperatures below 140 are considered flammable. | |
| (f) = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a diesel standard, however, the hydrocarbon pattern did not match a diesel pattern. | |
| (g) = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a gasoline standard, however, the hydrocarbon pattern did not match a gasoline pattern. | |
| (h) = High dilution due to matrix effects | |
| (i) = Samples with results below 500 mg/L are considered hazardous | |

QC SAMPLE IDENTIFICATIONS

- | | |
|---|-----------------------------------|
| MB = Method Blank | MS = Matrix Spike |
| RB = Reagent Blank | MSD = Matrix Spike Duplicate |
| ICB = Initial Calibration Blank | MD = Matrix Duplicate |
| CCB = Continuing Calibration Blank | RS = Reference Standard |
| SB = Storage Blank | BS = Blank Spike |
| CS = Calibration Standard | SS = Surrogate Spike |
| ICV = Initial Calibration Verification | LCS = Laboratory Control Standard |
| CCV = Continuing Calibration Verification | |

SUBCONTRACTED LABORATORY LOCATIONS

- | | | |
|-------------------------------|------------------------------|-----|
| Core Laboratories: | Aurora, Colorado(ELAP #1933) | *AU |
| | Casper, Wyoming | *CA |
| | Corpus Christi, Texas | *CC |
| | Houston, Texas | *HP |
| | Lake Charles, Louisiana | *LC |
| | Long Beach, California | *LB |
| Aquatic Testing Laboratories: | | |
| | Ventura, California | *AT |

Core Laboratories

CORE LABORATORIES
ANALYTICAL REPORT

Job Number: 941941

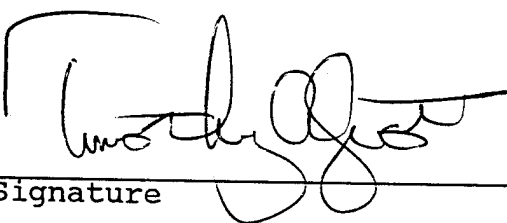
Prepared For:

Operational Technologies

John Morris

4100 NW Loop 410
San Antonio, TX 78289

Date: 08/22/94


Signature

8/24/94
Date:

Name: Timothy A. Scott

Core Laboratories
1250 Gene Autry Way
Anaheim, CA 92805

Title: Laboratory Manager

C.A.E.L.A.P. 1174
L.A.C.S.D. 10146

Core Laboratories**Case Narrative****Job Number 941941****EPA METHOD 8240**

Your samples were analyzed for volatile organics by EPA method 8240.

Initial and continuing calibrations met EPA method 8240 acceptance criteria for all SPCC and CCC compounds.

Method blanks analyzed with your samples met EPA method 8240 acceptance criteria for contamination and surrogate recovery.

Surrogate recoveries met EPA method 8240 acceptance criteria in all samples and spikes.

Samples 941941-3ms and 941941-4msd were designated in this batch to be used for matrix spike and spike duplicate analysis.

Core Laboratories

Case Narrative

Job Number 941941

EPA METHOD 8015

Your samples were analyzed for gasoline and diesel by modified EPA method 8015.

Initial and continuing calibrations met EPA method 8015 acceptance criteria:

The method blanks analyzed with your samples met EPA method 8015 acceptance criteria for contamination.

Samples 941941-3ms and 941941-4msd were designated in this batch to be used for matrix spike/spike duplicate analysis.

Core Laboratories**Case Narrative****Job Number 941941****Lead Analysis**

The samples associated with this batch were analyzed for lead by EPA 6010 (technically equivalent to EPA 7420).

All method criteria was within tolerances. 941941-2,3,4 was designated in this batch to be used for MS/MSD analysis.

Core Laboratories

LABORATORY TESTS RESULTS 08/22/94

INSTRUMENT NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941941-0001

DATE SAMPLED: 08/05/94

DATE RECEIVED: 08/06/94

TIME SAMPLED: 16:10

TIME RECEIVED: 11:00

WORK DESCRIPTION: 05-005 RBH 1.5

REMARKS: 2 brssl-v-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/12/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/09/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	105	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	108	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	98	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/15/94	RVJ

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Core Laboratories
LABORATORY TESTS RESULTS
08/22/94

JOB NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/05/94

TIME SAMPLED: 16:10

WORK DESCRIPTION: 05-005 RBH 1.5

LABORATORY I.D.: 941941-0001

DATE RECEIVED: 08/06/94

TIME RECEIVED: 11:00

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<500	500	ug/kg	EPA 8015 (modified)	08/12/94	RVJ
Lead (Pb)	12	10	mg/kg	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/11/94	RVJ

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Core Laboratories
LABORATORY TESTS RESULTS
08/22/94

JOB NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/05/94

TIME SAMPLED: 16:30

WORK DESCRIPTION: 05-005 RBH 6.5'-8'

LABORATORY I.D.: 941941-0002

DATE RECEIVED: 08/06/94

TIME RECEIVED: 11:00

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/12/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/09/94	CIS
Acetone	29	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	87	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	102	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	95	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/15/94	RVJ

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Core Laboratories
LABORATORY TESTS RESULTS
08/22/94

JOB NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.....: Hayward ANG 1315-115

DATE SAMPLED.....: 08/05/94

TIME SAMPLED.....: 16:30

WORK DESCRIPTION....: 05-005 RBH 6.5'-8'

LABORATORY I.D....: 941941-0002

DATE RECEIVED.....: 08/06/94

TIME RECEIVED.....: 11:00

REMARKS.....: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10 ✓	mg/kg	EPA 8015 (modified)		
Gasoline	<100	100	ug/kg	EPA 8015 (modified)	08/11/94	RVJ
Lead (Pb)	<10	10	mg/kg	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/11/94	RVJ

1250 Gene Autry Way
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(714) 937-1094

Core Laboratories
LABORATORY TESTS RESULTS
08/22/94

OB NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/05/94

TIME SAMPLED: 16:30

WORK DESCRIPTION: 05-005 RBH 6.5'-8' Matrix Spike

LABORATORY I.D.: 941941-0003

DATE RECEIVED: 08/06/94

TIME RECEIVED: 11:00

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/12/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/09/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	58	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	54	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	70	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	56	5	ug/kg	EPA 8240		
Toluene	57	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	91	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	102	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	97	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/15/94	RVJ

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08/22/94

JOB NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941941-0003

DATE SAMPLED: 08/05/94

DATE RECEIVED: 08/06/94

TIME SAMPLED: 16:30

TIME RECEIVED: 11:00

WORK DESCRIPTION: 05-005 RBH 6.5'-8' Matrix Spike

REMARKS: 2 brssl-v-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	470	10	mg/kg	EPA 8015 (modified)		
Gasoline	840	100	ug/kg	EPA 8015 (modified)	08/11/94	RVJ
Lead (Pb)	100	10	mg/kg	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/11/94	RVJ

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LABORATORY TESTS RESULTS
08/22/94

NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941941-0004

DATE SAMPLED: 08/05/94

DATE RECEIVED: 08/06/94

TIME SAMPLED: 16:30

TIME RECEIVED: 11:00

WORK DESCRIPTION: 05-005 RBH 6.5'-8' Matrix Spike Duplicat

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/12/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/09/94	CIS
Acetone	27	10	ug/kg	EPA 8240		
Benzene	58	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	55	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	67	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	57	5	ug/kg	EPA 8240		
Toluene	57	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	96	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	100	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	93	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/15/94	RVJ

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LABORATORY TESTS RESULTS 08/22/94

JOB NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941941-0004

DATE SAMPLED: 08/05/94

DATE RECEIVED: 08/06/94

TIME SAMPLED: 16:30

TIME RECEIVED: 11:00

WORK DESCRIPTION: 05-005 RBH 6.5'-8' Matrix Spike Duplicat

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	480	10	mg/kg	EPA 8015 (modified)		
Gasoline	1000	100	ug/kg	EPA 8015 (modified)	08/11/94	RVJ
Lead (Pb)	97	10	mg/kg	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/11/94	RVJ

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LABORATORY TESTS RESULTS 08/22/94

NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

SENT I.D.....: Hayward ANG 1315-115
DATE SAMPLED.....: 08/05/94
TIME SAMPLED.....: 16:15
WORK DESCRIPTION....: 05-005 RBH 6'

LABORATORY I.D....: 941941-0005
DATE RECEIVED.....: 08/06/94
TIME RECEIVED.....: 11:00
REMARKS.....: 2 brssl-v-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/12/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/10/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	98	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	98	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	100	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/15/94	RVJ

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LABORATORY TESTS RESULTS 08/22/94

JOB NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.....: Hayward ANG 1315-115

LABORATORY I.D....: 941941-0005

DATE SAMPLED.....: 08/05/94

DATE RECEIVED.....: 08/06/94

TIME SAMPLED.....: 16:15

TIME RECEIVED.....: 11:00

WORK DESCRIPTION....: 05-005 RBH 6'

REMARKS.....: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10 ✓	mg/kg	EPA 8015 (modified)		
Gasoline	<500	500	ug/kg	EPA 8015 (modified)	08/12/94	RVJ
Lead (Pb)	<10	10 ✓	mg/kg	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/11/94	RVJ

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LABORATORY TESTS RESULTS 08/22/94

NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
DATE SAMPLED: 08/05/94
TIME SAMPLED: 16:45
WORK DESCRIPTION: 05-005 RBH 11.5

LABORATORY I.D.: 941941-0006
DATE RECEIVED: 08/06/94
TIME RECEIVED: 11:00
REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/12/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/10/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	100	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	100	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	100	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/15/94	RVJ

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LABORATORY TESTS RESULTS
 08/22/94

JOB NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941941-0006

DATE SAMPLED: 08/05/94

DATE RECEIVED: 08/06/94

TIME SAMPLED: 16:45

TIME RECEIVED: 11:00

WORK DESCRIPTION: 05-005 RBH 11.5

REMARKS: 2 brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<100	100	ug/kg	EPA 8015 (modified)	08/15/94	RVJ
Lead (Pb)	<10	10	mg/kg	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/11/94	RVJ

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LABORATORY TESTS RESULTS
08/22/94

B NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941941-0007

DATE SAMPLED: 08/05/94

DATE RECEIVED: 08/06/94

TIME SAMPLED: 16:57

TIME RECEIVED: 11:00

WORK DESCRIPTION: 05-005 RBH 11.5'-13.0' Dup ✓

REMARKS: 2 brssl-v-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/12/94	ST
Volatile Organics by GC/MS		*1		EPA 8240	08/10/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	5	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	93	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	101	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	98	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/15/94	RVJ

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LABORATORY TESTS RESULTS

08/22/94

JOB NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941941-0007

DATE SAMPLED: 08/05/94

DATE RECEIVED: 08/06/94

TIME SAMPLED: 16:57

TIME RECEIVED: 11:00

WORK DESCRIPTION: 05-005 RBH 11.5'-13.0' Dup ✓

REMARKS: 2 brssl-v-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<100	100	ug/kg	EPA 8015 (modified)	08/15/94	RVJ
Lead (Pb)	<10	10	mg/kg	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/11/94	RVJ

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LABORATORY TESTS RESULTS

08/22/94

NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
 DATE SAMPLED: 08/05/94
 TIME SAMPLED: 17:00
 WORK DESCRIPTION: FB-1

LABORATORY I.D.: 941941-0008
 DATE RECEIVED: 08/06/94
 TIME RECEIVED: 11:00
 REMARKS: 1 .5LP-/3 voas-Field Blank

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 8240	08/10/94	CIS
Acetone	ND	10	ug/L	EPA 8240		
Benzene	ND	5	ug/L	EPA 8240		
Bromodichloromethane	ND	5	ug/L	EPA 8240		
Bromoform	ND	5	ug/L	EPA 8240		
Bromomethane	ND	10	ug/L	EPA 8240		
2-Butanone	ND	10	ug/L	EPA 8240		
Carbon disulfide	ND	5	ug/L	EPA 8240		
Carbon tetrachloride	ND	5	ug/L	EPA 8240		
Chlorobenzene	ND	5	ug/L	EPA 8240		
Chlorodibromomethane	ND	5	ug/L	EPA 8240		
Chloroethane	ND	10	ug/L	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 8240		
Chloroform	47	5	ug/L	EPA 8240		
Chloromethane	ND	10	ug/L	EPA 8240		
1,1-Dichloroethane	ND	5	ug/L	EPA 8240		
1,2-Dichloroethane	ND	5	ug/L	EPA 8240		
1,1-Dichloroethene	ND	5	ug/L	EPA 8240		
trans-1,2-Dichloroethene	ND	5	ug/L	EPA 8240		
1,2-Dichloropropane	ND	5	ug/L	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
Ethylbenzene	ND	5	ug/L	EPA 8240		
2-Hexanone	ND	10	ug/L	EPA 8240		
Methylene Chloride	ND	5	ug/L	EPA 8240		
4-Methyl-2-pentanone	12	10	ug/L	EPA 8240		
Styrene	ND	5	ug/L	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 8240		
Tetrachloroethene	ND	5	ug/L	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 8240		
Trichloroethene	ND	5	ug/L	EPA 8240		
Toluene	ND	5	ug/L	EPA 8240		
Vinyl acetate	ND	10	ug/L	EPA 8240		
Vinyl chloride	ND	10	ug/L	EPA 8240		
Total Xylenes	ND	5	ug/L	EPA 8240		
d4-Dichloroethane (SURROGATE)	97	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	95	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	99	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/11/94	RVJ
Diesel	ND	10	mg/L	EPA 8015 (modified)		

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LABORATORY TESTS RESULTS 08/22/94

JOB NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941941-0008

DATE SAMPLED: 08/05/94

DATE RECEIVED: 08/06/94

TIME SAMPLED: 17:00

TIME RECEIVED: 11:00

WORK DESCRIPTION: FB-1

REMARKS: 1 .5LP-/3 voas-Field Blank

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Gasoline	<100	100	ug/L	EPA 8015 (modified)	08/11/94	RVJ
Lead (Pb)	<0.100	0.100	mg/L	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/11/94	RVJ

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LABORATORY TESTS RESULTS 08/22/94

NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
DATE SAMPLED: 08/05/94
TIME SAMPLED: 17:00
WORK DESCRIPTION: EB-5

LABORATORY I.D.: 941941-0009
DATE RECEIVED: 08/06/94
TIME RECEIVED: 11:00
REMARKS: 1 .5LP-/3 voas-Equip Blank

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 8240	08/10/94	CIS
Acetone	ND	10	ug/L	EPA 8240		
Benzene	ND	5	ug/L	EPA 8240		
Bromodichloromethane	ND	5	ug/L	EPA 8240		
Bromoform	ND	5	ug/L	EPA 8240		
Bromomethane	ND	10	ug/L	EPA 8240		
2-Butanone	ND	10	ug/L	EPA 8240		
Carbon disulfide	ND	5	ug/L	EPA 8240		
Carbon tetrachloride	ND	5	ug/L	EPA 8240		
Chlorobenzene	ND	5	ug/L	EPA 8240		
Chlorodibromomethane	ND	5	ug/L	EPA 8240		
Chloroethane	ND	10	ug/L	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 8240		
Chloroform	ND	5	ug/L	EPA 8240		
Chloromethane	ND	10	ug/L	EPA 8240		
1,1-Dichloroethane	ND	5	ug/L	EPA 8240		
1,2-Dichloroethane	ND	5	ug/L	EPA 8240		
1,1-Dichloroethene	ND	5	ug/L	EPA 8240		
trans-1,2-Dichloroethene	ND	5	ug/L	EPA 8240		
1,2-Dichloropropane	ND	5	ug/L	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
Ethylbenzene	ND	5	ug/L	EPA 8240		
2-Hexanone	ND	10	ug/L	EPA 8240		
Methylene Chloride	ND	5	ug/L	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 8240		
Styrene	ND	5	ug/L	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 8240		
Tetrachloroethene	ND	5	ug/L	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 8240		
Trichloroethene	ND	5	ug/L	EPA 8240		
Toluene	ND	5	ug/L	EPA 8240		
Vinyl acetate	ND	10	ug/L	EPA 8240		
Vinyl chloride	ND	10	ug/L	EPA 8240		
Total Xylenes	ND	5	ug/L	EPA 8240		
d4-Dichloroethane (SURROGATE)	92	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	98	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	98	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/11/94	RVJ
Diesel	ND	10	mg/L	EPA 8015 (modified)		

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LABORATORY TESTS RESULTS 08/22/94

JOB NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/05/94

TIME SAMPLED: 17:00

WORK DESCRIPTION: EB-5

LABORATORY I.D.: 941941-0009

DATE RECEIVED: 08/06/94

TIME RECEIVED: 11:00

REMARKS: 1 .5LP-/3 voas-Equip Blank

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Gasoline	<100	100	ug/L	EPA 8015 (modified)	08/11/94	RVJ
Lead (Pb)	<0.100	0.100	mg/L	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/11/94	RVJ

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LABORATORY TESTS RESULTS

08/22/94

LAB NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
 DATE SAMPLED: / /
 TIME SAMPLED: :
 WORK DESCRIPTION: Trip Blank

LABORATORY I.D.: 941941-0010
 DATE RECEIVED: 08/06/94
 TIME RECEIVED: 11:00
 REMARKS: 1 vial-CORE DI H2O

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 8240	08/10/94	CIS
Acetone	ND	10	ug/L	EPA 8240		
Benzene	ND	5	ug/L	EPA 8240		
Bromodichloromethane	ND	5	ug/L	EPA 8240		
Bromoform	ND	5	ug/L	EPA 8240		
Bromomethane	ND	10	ug/L	EPA 8240		
2-Butanone	ND	10	ug/L	EPA 8240		
Carbon disulfide	ND	5	ug/L	EPA 8240		
Carbon tetrachloride	ND	5	ug/L	EPA 8240		
Chlorobenzene	ND	5	ug/L	EPA 8240		
Chlorodibromomethane	ND	5	ug/L	EPA 8240		
Chloroethane	ND	10	ug/L	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 8240		
Chloroform	ND	5	ug/L	EPA 8240		
Chloromethane	ND	10	ug/L	EPA 8240		
1,1-Dichloroethane	ND	5	ug/L	EPA 8240		
1,2-Dichloroethane	ND	5	ug/L	EPA 8240		
1,1-Dichloroethene	ND	5	ug/L	EPA 8240		
trans-1,2-Dichloroethene	ND	5	ug/L	EPA 8240		
1,2-Dichloropropane	ND	5	ug/L	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
Ethylbenzene	ND	5	ug/L	EPA 8240		
2-Hexanone	ND	10	ug/L	EPA 8240		
Methylene Chloride	ND	5	ug/L	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 8240		
Styrene	ND	5	ug/L	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 8240		
Tetrachloroethene	ND	5	ug/L	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 8240		
Trichloroethene	ND	5	ug/L	EPA 8240		
Toluene	ND	5	ug/L	EPA 8240		
Vinyl acetate	ND	10	ug/L	EPA 8240		
Vinyl chloride	ND	10	ug/L	EPA 8240		
Total Xylenes	ND	5	ug/L	EPA 8240		
d4-Dichloroethane (SURROGATE)	94	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	94	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	100	0	% Recovery	86-115% QC LIMITS		

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Core Laboratories

QUALITY ASSURANCE REPORT 08/22/94

JOB NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Gasoline REPORTING LIMIT/DF: 100 UNITS: ug/kg				DATE/TIME ANALYZED: 08/12/94 00:00 METHOD REFERENCE : EPA 8015 (modified)				QC BATCH NUMBER: 936753 TECHNICIAN: RVJ		
BLANK	METHOD	MB081294	<100							
SPIKE	MATRIX	941905-14	750					0	1000	75
SPIKE	MATRIX DUP	941905-14	700					0	1000	70
PARAMETER: Gasoline REPORTING LIMIT/DF: 100 UNITS: ug/L				DATE/TIME ANALYZED: 08/11/94 00:00 METHOD REFERENCE : EPA 8015 (modified)				QC BATCH NUMBER: 936756 TECHNICIAN: RVJ		
BLANK	METHOD	MB081194	<100							
SPIKE	MATRIX	941941-9	1200					0	1000	120
SPIKE	MATRIX DUP	941941-9	1300					0	1000	130
PARAMETER: Gasoline REPORTING LIMIT/DF: 100 UNITS: ug/kg				DATE/TIME ANALYZED: 08/11/94 00:00 METHOD REFERENCE : EPA 8015 (modified)				QC BATCH NUMBER: 936758 TECHNICIAN: RVJ		
BLANK	METHOD	MB081194	<100							
SPIKE	MATRIX	941941-2	840					0	1000	84
SPIKE	MATRIX DUP	941941-2	1000					0	1000	100
PARAMETER: Gasoline REPORTING LIMIT/DF: 100 UNITS: ug/kg				DATE/TIME ANALYZED: 08/15/94 00:00 METHOD REFERENCE : EPA 8015 (modified)				QC BATCH NUMBER: 936780 TECHNICIAN: RVJ		
BLANK	METHOD	MB081594	<100							
SPIKE	MATRIX	941941-2	840					0	1000	84
SPIKE	MATRIX DUP	941941-2	1000					0	1000	100
PARAMETER: Lead (Pb) REPORTING LIMIT/DF: 0.100 UNITS: mg/L				DATE/TIME ANALYZED: 08/19/94 13:54 METHOD REFERENCE : EPA 6010				QC BATCH NUMBER: 936963 TECHNICIAN: VB		
BLANK	ICB	081994	<0.100							
BLANK	CCB	081994	<0.100							
BLANK	CCB	081994	<0.100							
BLANK	MB	081794MB	<0.100							
BLANK	CCB	081994	0.111							
STANDARD	ICV	M94267	1.06			1.00	106			
STANDARD	CCV	M94267	1.14			1.00	114			
STANDARD	CCV	M94267	0.964			1.00	96			
STANDARD	LCS	081794LCS	0.859			1.00	86			
STANDARD	CCV	M94267	0.914			1.00	91			
STANDARD	CCV	M94267	0.995			1.00	100			
SPIKE	MATRIX	941941-7	102					9.8	100	92
SPIKE	MATRIX	941941-7	105					9.8	100	95
SPIKE	MATRIX	941941-3	106					0	100	106
SPIKE	MATRIX	941941-4	96.8					0	100	97
SPIKE	MATRIX	941979-8	97.7					0.74	100	97
SPIKE	MATRIX	941979-8	99.0					0.74	100	98
DUPLICATE	MS/MSD	941941-3	106	96.8	9					

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QUALITY ASSURANCE REPORT
08/22/94

NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

Total Petroleum Hydrocarbons

DATE ANALYZED: 08/11/94 TIME ANALYZED: 00:00 METHOD: EPA 8015 (modified) QC NUMBER:936846

M A T R I X S P I K E S

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Diesel	Matrix	941849-18	1	390	0	500	78	10	mg/L
	Matrix Dup	941849-18	1	400	0	500	80	10	mg/L

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QUALITY ASSURANCE REPORT
08/22/94

NUMBER: 941941

CUSTOMER: Operational Technologies

ATTN: John Morris

Total Petroleum Hydrocarbons

DATE ANALYZED: 08/15/94 TIME ANALYZED: 00:00 METHOD: EPA 8015 (modified) QC NUMBER:936854

M A T R I X S P I K E S

[illegible]

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QUALITY ASSURANCE REPORT

EPA Method 8240

JOB NUMBER: 941941

DATE ANALYZED: 8/9/94

B L A N K S

TEST DESCRIPTION	ANALYS.SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Acetone	METHOD	080994	1	ND	10	ug/kg
Benzene	METHOD	080994	1	ND	5	ug/kg
Bromodichloromethane	METHOD	080994	1	ND	5	ug/kg
Bromoform	METHOD	080994	1	ND	5	ug/kg
Bromomethane	METHOD	080994	1	ND	10	ug/kg
2-Butanone	METHOD	080994	1	ND	10	ug/kg
Carbon disulfide	METHOD	080994	1	ND	5	ug/kg
Carbon tetrachloride	METHOD	080994	1	ND	5	ug/kg
Chlorobenzene	METHOD	080994	1	ND	5	ug/kg
Chlorodibromomethane	METHOD	080994	1	ND	5	ug/kg
Chloroethane	METHOD	080994	1	ND	10	ug/kg
2-Chloroethylvinyl ether	METHOD	080994	1	ND	10	ug/kg
Chloroform	METHOD	080994	1	ND	5	ug/kg
Chloromethane	METHOD	080994	1	ND	10	ug/kg
1,1-Dichloroethane	METHOD	080994	1	ND	5	ug/kg
1,2-Dichloroethene	METHOD	080994	1	ND	5	ug/kg
1,1-Dichloroethene	METHOD	080994	1	ND	5	ug/kg
1,2-Dichloroethene (total)	METHOD	080994	1	ND	5	ug/kg
1,2-Dichloropropane	METHOD	080994	1	ND	5	ug/kg
cis-1,3-Dichloropropene	METHOD	080994	1	ND	5	ug/kg
trans-1,3-Dichloropropene	METHOD	080994	1	ND	5	ug/kg
Ethylbenzene	METHOD	080994	1	ND	5	ug/kg
2-Hexanone	METHOD	080994	1	ND	10	ug/kg
Methylene chloride	METHOD	080994	1	ND	5	ug/kg
4-Methyl-2-pentanone	METHOD	080994	1	ND	10	ug/kg
Styrene	METHOD	080994	1	ND	5	ug/kg
1,1,2,2-Tetrachloroethane	METHOD	080994	1	ND	5	ug/kg
Tetrachloroethene	METHOD	080994	1	ND	5	ug/kg
Toluene	METHOD	080994	1	ND	5	ug/kg
1,1,1-Trichloroethane	METHOD	080994	1	ND	5	ug/kg
1,1,2-Trichloroethane	METHOD	080994	1	ND	5	ug/kg
Trichloroethene	METHOD	080994	1	ND	5	ug/kg
Vinyl acetate	METHOD	080994	1	ND	5	ug/kg
Vinyl chloride	METHOD	080994	1	ND	10	ug/kg
Total xylenes	METHOD	080994	1	ND	5	ug/kg
d4-1,2-Dichloroethane (SURROGATE)	METHOD	080994	1	90	76-114	% recovery
d8-Toluene (SURROGATE)	METHOD	080994	1	104	88-110	% recovery
4-Bromofluorobenzene (SURROGATE)	METHOD	080994	1	104	86-115	% recovery

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QUALITY ASSURANCE REPORT

EPA Method 8240

JOB NUMBER: 941941

DATE ANALYZED: 8/9/94

MATRIX SPIKES

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	UNITS	PERCENT RECOVERY	RPD	QC LIMITS %REC	RPD
Benzene	MATRIX	941941-3	58	0	50	ug/kg	116	0.0	66-142	21
	MATRIX DUP	941941-4	58	0	50	ug/kg	116			
Chlorobenzene	MATRIX	941941-3	54	0	50	ug/kg	108	1.8	60-133	21
	MATRIX DUP	941941-4	55	0	50	ug/kg	110			
1,1-Dichloroethene	MATRIX	941941-3	70	0	50	ug/kg	140	4.4	59-172	22
	MATRIX DUP	941941-4	67	0	50	ug/kg	134			
Trichloroethene	MATRIX	941941-3	56	0	50	ug/kg	112	1.8	62-137	24
	MATRIX DUP	941941-4	57	0	50	ug/kg	114			
Toluene	MATRIX	941941-3	57	0	50	ug/kg	114	0.0	59-139	21
	MATRIX DUP	941941-4	57	0	50	ug/kg	114			
d4-Dichloroethane (SURROGATE)	MATRIX	941941-3	46	0	50	ug/kg	92	N/A	70-121	N/A
	MATRIX DUP	941941-4	48	0	50	ug/kg	96			
8-Toluene (SURROGATE)	MATRIX	941941-3	51	0	50	ug/kg	102	N/A	84-138	N/A
	MATRIX DUP	941941-4	50	0	50	ug/kg	100			
4-Bromofluorobenzene (SURROGAT	MATRIX	941941-3	49	0	50	ug/kg	98	N/A	59-113	N/A
	MATRIX DUP	941941-4	46	0	50	ug/kg	92			

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QUALITY ASSURANCE FOOTER

METHOD REFERENCES

- (1) EPA SW-846, Test Methods for Evaluating Solid Waste, Third Edition, November 1990, and July 1992 update
- (2) Standard Methods for the Examination of Water and Wastewater, 17th Edition, 1989
- (3) EPA 600/4-79-020, Methods of Chemical Analysis for Waters and Wastes, March 1983
- (4) Federal Register, Friday, October 26, 1984 (40 CFR Part 136)
- (5) American Society for Testing and Materials, Volumes 5.01, 5.02, 5.03, 1992
- (6) EPA 600/4-89-001, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Fresh Water Organisms
- (7) EPA 600/4-90-027, Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Fresh Water and Marine Organisms, Fourth Edition

COMMENTS

All methods of chemical analysis have a statistical uncertainty associated with the results. Unless otherwise indicated, the data in this report are within the limits of uncertainty as specified in the referenced method. Quality control acceptance criteria are based either on actual laboratory performance or on limits specified in the referenced method. The date and time of analysis indicated on the QA report may not reflect the actual time of analysis for QC samples. All data reported on an "as received" basis unless otherwise indicated. Data reported in the QA report may be lower than sample data due to dilution of samples into the calibration range of the analysis. Sample concentrations for solid samples are calculated on an as received (wet) basis.

FLAGS, FOOTNOTES, AND ABBREVIATIONS (as needed)

- | | |
|--|--|
| NA = Not analyzed | N.I. = Not Ignitable |
| N/A = Not applicable | S.I. = Sustains Ignition |
| ug/L = Micrograms per liter | I(NS) = Ignites, but does not Sustain Ignition |
| mg/L = Milligrams per liter | RPD = Relative Percent Difference |
| ND = Not detected at a value greater than the reporting limit | |
| NC = Not calculable due to values lower than the detection limit | |
| (a) = Surrogate recoveries were outside acceptable ranges due to matrix effects. | |
| (b) = Surrogate recoveries were not calculated due to dilution of the sample below the detectable range for the surrogate. | |
| (c) = Matrix spike recoveries were outside acceptable ranges due to matrix effects. | |
| (d) = Relative Percent Difference (RPD) for duplicate analysis outside acceptance limits due to actual differences in the sample matrix. | |
| (e) = The limit listed for flammability indicates the upper limit for the test. Samples are not tested at temperatures above 140 Fahrenheit since only samples which will sustain ignition at temperatures below 140 are considered flammable. | |
| (f) = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a diesel standard, however, the hydrocarbon pattern did not match a diesel pattern. | |
| (g) = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a gasoline standard, however, the hydrocarbon pattern did not match a gasoline pattern. | |
| (h) = High dilution due to matrix effects | |
| (i) = Samples with results below 500 mg/L are considered hazardous | |

QC SAMPLE IDENTIFICATIONS

- | | |
|---|-----------------------------------|
| MB = Method Blank | MS = Matrix Spike |
| RB = Reagent Blank | MSD = Matrix Spike Duplicate |
| ICB = Initial Calibration Blank | MD = Matrix Duplicate |
| CCB = Continuing Calibration Blank | RS = Reference Standard |
| SB = Storage Blank | BS = Blank Spike |
| CS = Calibration Standard | SS = Surrogate Spike |
| ICV = Initial Calibration Verification | LCS = Laboratory Control Standard |
| CCV = Continuing Calibration Verification | |

SUBCONTRACTED LABORATORY LOCATIONS

- | | | |
|-------------------------------|------------------------------|-----|
| Core Laboratories: | Aurora, Colorado(ELAP #1933) | *AU |
| | Casper, Wyoming | *CA |
| | Corpus Christi, Texas | *CC |
| | Houston, Texas | *HP |
| | Lake Charles, Louisiana | *LC |
| | Long Beach, California | *LB |
| Aquatic Testing Laboratories: | | |
| | Ventura, California | *AT |

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CORE LABORATORIES
ANALYTICAL REPORT

Job Number: 941953

Prepared For:

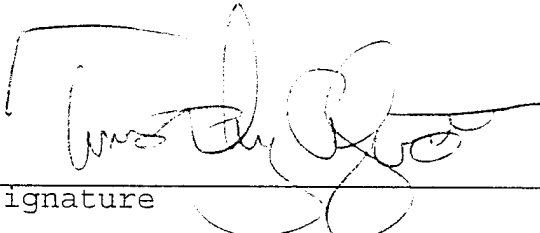
Operational Technologies

John Morris

4100 NW Loop 410

San Antonio, TX 78289

Date: 08/24/94


Signature

8/25/94
Date:

Name: Timothy A. Scott

Core Laboratories
1250 Gene Autry Way
Anaheim, CA 92805

Title: Laboratory Manager

CA. E. L. A. P. 1174
L. A. C. S. D. 10146

Core Laboratories**Case Narrative****Job Number 941953****Lead Analysis**

The samples associated with this batch were analyzed for lead by EPA 6010 (technically equivalent to EPA 7420).

All method criteria was within tolerances. No sample was designated in this batch to be used for MS/MSD analysis.

Core Laboratories

Case Narrative

Job Number 941953

EPA METHOD 8015

Your samples were analyzed for gasoline and diesel by modified EPA method 8015.

Initial and continuing calibrations met EPA method 8015 acceptance criteria.

The method blanks analyzed with your samples met EPA method 8015 acceptance criteria for contamination.

No sample was designated in this batch to be used for matrix spike/spike duplicate analysis.

The results of the Blank Spike/Blank Spike Dup showed good recoveries indicating the laboratory was in control.

Core Laboratories**Case Narrative****Job Number 941953****EPA METHOD 8240**

Your samples were analyzed for volatile organics by EPA method 8240.

Initial and continuing calibrations met EPA method 8240 acceptance criteria for all SPCC and CCC compounds.

The method blanks analyzed with your samples met EPA method 8240 acceptance criteria for contamination and surrogate recovery.

Surrogate recoveries met EPA method 8240 acceptance criteria in all samples and spikes with the following exceptions:

Samples 941953-5,8,11,12 & 13 had high recovery for toluene-d8. Samples 941953-9,12 & 13 also had high recovery for bromofluorobenzene. Re-analysis confirmed this to be a matrix problem.

No sample was designated in this batch to be used for matrix spike and spike duplicate analysis.

The results of the Blank Spike/Blank Spike Dup showed good recoveries indicating the laboratory was in control.

Core Laboratories

LABORATORY TESTS RESULTS

08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/06/94

TIME SAMPLED: 08:35

WORK DESCRIPTION: 05-001R-BH 1.5'

LABORATORY I.D.: 941953-0001

DATE RECEIVED: 08/09/94

TIME RECEIVED: 09:20

REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/15/94	LS
Volatile Organics by GC/MS		*1		EPA 8240	08/12/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	108	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	109	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	90	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/18/94	RW

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LABORATORY TESTS RESULTS 08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941953-0001

DATE SAMPLED: 08/06/94

DATE RECEIVED: 08/09/94

TIME SAMPLED: 08:35

TIME RECEIVED: 09:20

WORK DESCRIPTION: 05-001R-BH 1.5'

REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<100	100	ug/kg	EPA 8015 (modified)	08/15/94	RVJ
Lead (Pb)	16	5.0	mg/kg	EPA 6010	08/16/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/11/94	RVJ
Raw data required (Metals)	N/A				N/A	N/A
Raw data required (Organics)	N/A				N/A	N/A

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LABORATORY TESTS RESULTS

08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/06/94

TIME SAMPLED: 09:06

WORK DESCRIPTION: 05-001R-BH 11.5'

LABORATORY I.D.: 941953-0002

DATE RECEIVED: 08/09/94

TIME RECEIVED: 09:20

REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/15/94	LS
Volatile Organics by GC/MS		*1		EPA 8240	08/12/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	102	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	102	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	98	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/16/94	RVJ

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LABORATORY TESTS RESULTS 08/24/94

JOB NUMBER: 941953 CUSTOMER: Operational Technologies ATTN: John Morris

CLIENT I.D.....: Hayward ANG 1315-115
 DATE SAMPLED.....: 08/06/94
 TIME SAMPLED.....: 09:06
 WORK DESCRIPTION...: 05-001R-BH 11.5'

LABORATORY I.D....: 941953-0002
 DATE RECEIVED.....: 08/09/94
 TIME RECEIVED.....: 09:20
 REMARKS.....: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<100	100	ug/kg	EPA 8015 (modified)	08/15/94	RVJ
Lead (Pb)	<5.0	5.0	mg/kg	EPA 6010	08/16/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/11/94	RVJ
Raw data required (Metals)	N/A				N/A	N/A
Raw data required (Organics)	N/A				N/A	N/A

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LABORATORY TESTS RESULTS
08/24/94

OB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/06/94

TIME SAMPLED: 09:10

WORK DESCRIPTION: 05-001R-BH 11.5' Duplicate

LABORATORY I.D.: 941953-0003

DATE RECEIVED: 08/09/94

TIME RECEIVED: 09:20

REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/15/94	LS
Volatile Organics by GC/MS		*1		EPA 8240	08/12/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	104	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	106	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	97	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/16/94	RVJ

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LABORATORY TESTS RESULTS 08/24/94

JOB NUMBER: 941953 CUSTOMER: Operational Technologies ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
 DATE SAMPLED: 08/06/94
 TIME SAMPLED: 09:10
 WORK DESCRIPTION: 05-001R-BH 11.5' Duplicate

LABORATORY I.D.: 941953-0003
 DATE RECEIVED: 08/09/94
 TIME RECEIVED: 09:20
 REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<100	100	ug/kg	EPA 8015 (modified)	08/15/94	RVJ
Lead (Pb)	<5.0	5.0	mg/kg	EPA 6010	08/16/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/11/94	RVJ
Raw data required (Metals)	N/A				N/A	N/A
Raw data required (Organics)	N/A				N/A	N/A

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LABORATORY TESTS RESULTS
08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/06/94

TIME SAMPLED: 09:27

WORK DESCRIPTION: 05-001R-BH 14'-15.5'

LABORATORY I.D.: 941953-0004

DATE RECEIVED: 08/09/94

TIME RECEIVED: 09:20

REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	----	N/A	EPA 3050	08/15/94	LS
Volatile Organics by GC/MS		*1		EPA 8240	08/12/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	110	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	102	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	121	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/16/94	RVJ

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LABORATORY TESTS RESULTS 08/24/94

JOB NUMBER: 941953 CUSTOMER: Operational Technologies ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
 DATE SAMPLED: 08/06/94
 TIME SAMPLED: 09:27
 WORK DESCRIPTION: 05-001R-BH 14'-15.5'

LABORATORY I.D.: 941953-0004
 DATE RECEIVED: 08/09/94
 TIME RECEIVED: 09:20
 REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<100	100	ug/kg	EPA 8015 (modified)	08/15/94	RVJ
Lead (Pb)	<5.0	5.0	mg/kg	EPA 6010	08/16/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/11/94	RVJ
Raw data required (Metals)	N/A				N/A	N/A
Raw data required (Organics)	N/A				N/A	N/A

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LABORATORY TESTS RESULTS 08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/06/94

TIME SAMPLED: 10:38

WORK DESCRIPTION: 05-002R-BH 2'

LABORATORY I.D.: 941953-0005

DATE RECEIVED: 08/09/94

TIME RECEIVED: 09:20

REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/15/94	LS
Volatile Organics by GC/MS		*1		EPA 8240	08/15/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	6	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	100	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	115(a)	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	84	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/16/94	RVJ

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LABORATORY TESTS RESULTS 08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
DATE SAMPLED: 08/06/94
TIME SAMPLED: 10:38
WORK DESCRIPTION: 05-002R-BH 2'

LABORATORY I.D.: 941953-0005
DATE RECEIVED: 08/09/94
TIME RECEIVED: 09:20
REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	2200	500	ug/kg	EPA 8015 (modified)	08/18/94	RW
Lead (Pb)	8.7	5.0	mg/kg	EPA 6010	08/16/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/11/94	RVJ
Raw data required (Metals)	N/A				N/A	N/A
Raw data required (Organics)	N/A				N/A	N/A

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LABORATORY TESTS RESULTS
08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/06/94

TIME SAMPLED: 10:58

WORK DESCRIPTION: 05-002R-BH 11'

LABORATORY I.D.: 941953-0006

DATE RECEIVED: 08/09/94

TIME RECEIVED: 09:20

REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/15/94	LS
Volatile Organics by GC/MS		*5		EPA 8240	08/15/94	CIS
Acetone	59	50	ug/kg	EPA 8240		
Benzene	ND	25	ug/kg	EPA 8240		
Bromodichloromethane	ND	25	ug/kg	EPA 8240		
Bromoform	ND	25	ug/kg	EPA 8240		
Bromomethane	ND	50	ug/kg	EPA 8240		
2-Butanone	ND	50	ug/kg	EPA 8240		
Carbon disulfide	30	25	ug/kg	EPA 8240		
Carbon tetrachloride	ND	25	ug/kg	EPA 8240		
Chlorobenzene	ND	25	ug/kg	EPA 8240		
Chlorodibromomethane	ND	25	ug/kg	EPA 8240		
Chloroethane	ND	50	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	50	ug/kg	EPA 8240		
Chloroform	ND	25	ug/kg	EPA 8240		
Chloromethane	ND	50	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	25	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	25	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	25	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	25	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	25	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	25	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	25	ug/kg	EPA 8240		
Ethylbenzene	ND	25	ug/kg	EPA 8240		
2-Hexanone	ND	50	ug/kg	EPA 8240		
Methylene Chloride	ND	25	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	50	ug/kg	EPA 8240		
Styrene	ND	25	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	25	ug/kg	EPA 8240		
Tetrachloroethene	ND	25	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	25	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	25	ug/kg	EPA 8240		
Trichloroethene	ND	25	ug/kg	EPA 8240		
Toluene	ND	25	ug/kg	EPA 8240		
Vinyl acetate	ND	50	ug/kg	EPA 8240		
Vinyl chloride	ND	50	ug/kg	EPA 8240		
Total Xylenes	ND	25	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	102	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	102	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	100	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/16/94	RVJ

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Core Laboratories
LABORATORY TESTS RESULTS
08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
DATE SAMPLED: 08/06/94
TIME SAMPLED: 10:58
WORK DESCRIPTION: 05-002R-BH 11'

LABORATORY I.D.: 941953-0006
DATE RECEIVED: 08/09/94
TIME RECEIVED: 09:20
REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	1100	500	ug/kg	EPA 8015 (modified)	08/18/94	RW
Lead (Pb)	<5.0	5.0	mg/kg	EPA 6010	08/16/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/15/94	RVJ
Raw data required (Metals)	N/A				N/A	N/A
Raw data required (Organics)	N/A				N/A	N/A

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LABORATORY TESTS RESULTS
08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/06/94

TIME SAMPLED: 11:14

WORK DESCRIPTION: 05-002R-BH 15'

LABORATORY I.D.: 941953-0007

DATE RECEIVED: 08/09/94

TIME RECEIVED: 09:20

REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	----	N/A	EPA 3050	08/15/94	LS
Volatile Organics by GC/MS		*1		EPA 8240	08/12/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	104	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	106	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	98	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/16/94	RVJ

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LABORATORY TESTS RESULTS 08/24/94

JOB NUMBER: 941953 CUSTOMER: Operational Technologies ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
DATE SAMPLED: 08/06/94
TIME SAMPLED: 11:14
WORK DESCRIPTION: 05-002R-BH 15'

LABORATORY I.D.: 941953-0007
DATE RECEIVED: 08/09/94
TIME RECEIVED: 09:20
REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<500	500	ug/kg	EPA 8015 (modified)	08/18/94	RW
Lead (Pb)	<5.0	5.0	mg/kg	EPA 6010	08/16/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/15/94	RVJ
Raw data required (Metals)	N/A				N/A	N/A
Raw data required (Organics)	N/A				N/A	N/A

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LABORATORY TESTS RESULTS
08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941953-0008

DATE SAMPLED: 08/06/94

DATE RECEIVED: 08/09/94

TIME SAMPLED: 11:57

TIME RECEIVED: 09:20

WORK DESCRIPTION: 05-003R-BH 1.5'

REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/15/94	LS
Volatile Organics by GC/MS		*1		EPA 8240	08/15/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	6	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	100	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	118(a)	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	82	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/16/94	RVJ

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LABORATORY TESTS RESULTS
08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/06/94

TIME SAMPLED: 11:57

WORK DESCRIPTION: 05-003R-BH 1.5'

LABORATORY I.D.: 941953-0008

DATE RECEIVED: 08/09/94

TIME RECEIVED: 09:20

REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<500	500	ug/kg	EPA 8015 (modified)	08/18/94	RW
Lead (Pb)	18	5.0	mg/kg	EPA 6010	08/16/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/15/94	RVJ
Raw data required (Metals)	N/A				N/A	N/A
Raw data required (Organics)	N/A				N/A	N/A

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LABORATORY TESTS RESULTS

08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/06/94

TIME SAMPLED: 12:26

WORK DESCRIPTION: 05-003R-BH 11'

LABORATORY I.D.: 941953-0009

DATE RECEIVED: 08/09/94

TIME RECEIVED: 09:20

REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/15/94	LS
Volatile Organics by GC/MS		*5		EPA 8240	08/15/94	CIS
Acetone	ND	50	ug/kg	EPA 8240		
Benzene	30	25	ug/kg	EPA 8240		
Bromodichloromethane	ND	25	ug/kg	EPA 8240		
Bromoform	ND	25	ug/kg	EPA 8240		
Bromomethane	ND	50	ug/kg	EPA 8240		
2-Butanone	ND	50	ug/kg	EPA 8240		
Carbon disulfide	30	25	ug/kg	EPA 8240		
Carbon tetrachloride	ND	25	ug/kg	EPA 8240		
Chlorobenzene	ND	25	ug/kg	EPA 8240		
Chlorodibromomethane	ND	25	ug/kg	EPA 8240		
Chloroethane	ND	50	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	50	ug/kg	EPA 8240		
Chloroform	ND	25	ug/kg	EPA 8240		
Chloromethane	ND	50	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	25	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	25	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	25	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	25	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	25	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	25	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	25	ug/kg	EPA 8240		
Ethylbenzene	ND	25	ug/kg	EPA 8240		
2-Hexanone	ND	50	ug/kg	EPA 8240		
Methylene Chloride	ND	25	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	50	ug/kg	EPA 8240		
Styrene	ND	25	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	25	ug/kg	EPA 8240		
Tetrachloroethene	ND	25	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	25	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	25	ug/kg	EPA 8240		
Trichloroethene	ND	25	ug/kg	EPA 8240		
Toluene	ND	25	ug/kg	EPA 8240		
Vinyl acetate	ND	50	ug/kg	EPA 8240		
Vinyl chloride	ND	50	ug/kg	EPA 8240		
Total Xylenes	ND	25	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	104	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	110	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	144(a)	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/16/94	RVJ

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LABORATORY TESTS RESULTS 08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/06/94

TIME SAMPLED: 12:26

WORK DESCRIPTION: 05-003R-BH 11'

LABORATORY I.D.: 941953-0009

DATE RECEIVED: 08/09/94

TIME RECEIVED: 09:20

REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	3200	500	ug/kg	EPA 8015 (modified)	08/18/94	RW
Lead (Pb)	8.5	5.0	mg/kg	EPA 6010	08/16/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/15/94	RVJ
Raw data required (Metals)	N/A				N/A	N/A
Raw data required (Organics)	N/A				N/A	N/A

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LABORATORY TESTS RESULTS
08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941953-0010

DATE SAMPLED: 08/06/94

DATE RECEIVED: 08/09/94

TIME SAMPLED: 12:29

TIME RECEIVED: 09:20

WORK DESCRIPTION: 05-003R-BH 15'

REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	----	N/A	EPA 3050	08/15/94	LS
Volatile Organics by GC/MS		*1		EPA 8240	08/15/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	106	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	104	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	100	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/16/94	RVJ

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LABORATORY TESTS RESULTS 08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
DATE SAMPLED: 08/06/94
TIME SAMPLED: 12:29
WORK DESCRIPTION: 05-003R-BH 15'

LABORATORY I.D.: 941953-0010
DATE RECEIVED: 08/09/94
TIME RECEIVED: 09:20
REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	1200	500	ug/kg	EPA 8015 (modified)	08/18/94	RW
Lead (Pb)	11	5.0	mg/kg	EPA 6010	08/16/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/15/94	RVJ
Raw data required (Metals)	N/A				N/A	N/A
Raw data required (Organics)	N/A				N/A	N/A

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LABORATORY TESTS RESULTS
08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/06/94

TIME SAMPLED: 13:12

WORK DESCRIPTION: 05-004R-BH 1.5'

LABORATORY I.D.: 941953-0011

DATE RECEIVED: 08/09/94

TIME RECEIVED: 09:20

REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/15/94	LS
Volatile Organics by GC/MS		*1		EPA 8240	08/12/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	23	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	108	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	117(a)	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	88	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/16/94	RVJ

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Core Laboratories

LABORATORY TESTS RESULTS 08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/06/94

TIME SAMPLED: 13:12

WORK DESCRIPTION: 05-004R-BH 1.5'

LABORATORY I.D.: 941953-0011

DATE RECEIVED: 08/09/94

TIME RECEIVED: 09:20

REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<500	500	ug/kg	EPA 8015 (modified)	08/18/94	RW
Lead (Pb)	37	5.0	mg/kg	EPA 6010	08/16/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/15/94	RVJ
Raw data required (Metals)	N/A				N/A	N/A
Raw data required (Organics)	N/A				N/A	N/A

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Core Laboratories
LABORATORY TESTS RESULTS
08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/06/94

TIME SAMPLED: 13:16

WORK DESCRIPTION: 05-004R-BH 6'

LABORATORY I.D.: 941953-0012

DATE RECEIVED: 08/09/94

TIME RECEIVED: 09:20

REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/15/94	LS
Volatile Organics by GC/MS		*100		EPA 8240	08/15/94	CIS
Acetone	ND	1000	ug/kg	EPA 8240		
Benzene	ND	500	ug/kg	EPA 8240		
Bromodichloromethane	ND	500	ug/kg	EPA 8240		
Bromoform	ND	500	ug/kg	EPA 8240		
Bromomethane	ND	1000	ug/kg	EPA 8240		
2-Butanone	ND	1000	ug/kg	EPA 8240		
Carbon disulfide	ND	500	ug/kg	EPA 8240		
Carbon tetrachloride	ND	500	ug/kg	EPA 8240		
Chlorobenzene	ND	500	ug/kg	EPA 8240		
Chlorodibromomethane	ND	500	ug/kg	EPA 8240		
Chloroethane	ND	1000	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	1000	ug/kg	EPA 8240		
Chloroform	ND	500	ug/kg	EPA 8240		
Chloromethane	ND	1000	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	500	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	500	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	500	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	500	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	500	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	500	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	500	ug/kg	EPA 8240		
Ethylbenzene	ND	500	ug/kg	EPA 8240		
2-Hexanone	ND	1000	ug/kg	EPA 8240		
Methylene Chloride	ND	500	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	1000	ug/kg	EPA 8240		
Styrene	ND	500	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	500	ug/kg	EPA 8240		
Tetrachloroethene	ND	500	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	500	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	500	ug/kg	EPA 8240		
Trichloroethene	ND	500	ug/kg	EPA 8240		
Toluene	ND	500	ug/kg	EPA 8240		
Vinyl acetate	ND	1000	ug/kg	EPA 8240		
Vinyl chloride	ND	1000	ug/kg	EPA 8240		
Total Xylenes	ND	500	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	106	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	123(a)	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	142(a)	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/16/94	RVJ

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LABORATORY TESTS RESULTS
08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941953-0012

DATE SAMPLED: 08/06/94

DATE RECEIVED: 08/09/94

TIME SAMPLED: 13:16

TIME RECEIVED: 09:20

WORK DESCRIPTION: 05-004R-BH 6'

REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	19000	100	ug/kg	EPA 8015 (modified)	08/19/94	RVJ
Lead (Pb)	16	5.0	mg/kg	EPA 6010	08/16/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/15/94	RVJ
Raw data required (Metals)	N/A				N/A	N/A
Raw data required (Organics)	N/A				N/A	N/A

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LABORATORY TESTS RESULTS 08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/06/94

TIME SAMPLED: 13:45

WORK DESCRIPTION: 05-004R-BH 11'

LABORATORY I.D.: 941953-0013

DATE RECEIVED: 08/09/94

TIME RECEIVED: 09:20

REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/15/94	LS
Volatile Organics by GC/MS		*100		EPA 8240	08/17/94	CIS
Acetone	ND	1000	ug/kg	EPA 8240		
Benzene	ND	500	ug/kg	EPA 8240		
Bromodichloromethane	ND	500	ug/kg	EPA 8240		
Bromoform	ND	500	ug/kg	EPA 8240		
Bromomethane	ND	1000	ug/kg	EPA 8240		
2-Butanone	ND	1000	ug/kg	EPA 8240		
Carbon disulfide	ND	500	ug/kg	EPA 8240		
Carbon tetrachloride	ND	500	ug/kg	EPA 8240		
Chlorobenzene	ND	500	ug/kg	EPA 8240		
Chlorodibromomethane	ND	500	ug/kg	EPA 8240		
Chloroethane	ND	1000	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	1000	ug/kg	EPA 8240		
Chloroform	ND	500	ug/kg	EPA 8240		
Chloromethane	ND	1000	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	500	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	500	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	500	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	500	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	500	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	500	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	500	ug/kg	EPA 8240		
Ethylbenzene	ND	500	ug/kg	EPA 8240		
2-Hexanone	ND	1000	ug/kg	EPA 8240		
Methylene Chloride	ND	500	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	1000	ug/kg	EPA 8240		
Styrene	ND	500	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	500	ug/kg	EPA 8240		
Tetrachloroethene	ND	500	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	500	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	500	ug/kg	EPA 8240		
Trichloroethene	ND	500	ug/kg	EPA 8240		
Toluene	ND	500	ug/kg	EPA 8240		
Vinyl acetate	ND	1000	ug/kg	EPA 8240		
Vinyl chloride	ND	1000	ug/kg	EPA 8240		
Total Xylenes	ND	500	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	92	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	119(a)	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	128(a)	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/16/94	RVJ

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LABORATORY TESTS RESULTS
11/01/94

JOB NUMBER: 941953 CUSTOMER: Operational Technologies ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115 LABORATORY I.D.: 941953-0013
DATE SAMPLED: 08/06/94 DATE RECEIVED: 08/09/94
TIME SAMPLED: 13:45 TIME RECEIVED: 09:20
WORK DESCRIPTION: 05-004R-BH 11' REMARKS: 2 sleeves-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	8400	500	ug/kg	EPA 8015 (modified)	08/19/94	RVJ
Lead (Pb)	<5.0	5.0	mg/kg	EPA 6010	08/16/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/15/94	RVJ
Raw Data Required (Metals)	N/A				N/A	N/A
Raw Data Required (Organics)	N/A				N/A	N/A

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LABORATORY TESTS RESULTS 08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941953-0014

DATE SAMPLED: 08/06/94

DATE RECEIVED: 08/09/94

TIME SAMPLED: 15:00

TIME RECEIVED: 09:20

WORK DESCRIPTION: EB-6

REMARKS: 1 .5LP-3 voas-Equipment Blank

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 8240	08/15/94	CIS
Acetone	11	10	ug/L	EPA 8240		
Benzene	ND	5	ug/L	EPA 8240		
Bromodichloromethane	ND	5	ug/L	EPA 8240		
Bromoform	ND	5	ug/L	EPA 8240		
Bromomethane	ND	10	ug/L	EPA 8240		
2-Butanone	14	10	ug/L	EPA 8240		
Carbon disulfide	ND	5	ug/L	EPA 8240		
Carbon tetrachloride	ND	5	ug/L	EPA 8240		
Chlorobenzene	ND	5	ug/L	EPA 8240		
Chlorodibromomethane	ND	5	ug/L	EPA 8240		
Chloroethane	ND	10	ug/L	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 8240		
Chloroform	ND	5	ug/L	EPA 8240		
Chloromethane	ND	10	ug/L	EPA 8240		
1,1-Dichloroethane	ND	5	ug/L	EPA 8240		
1,2-Dichloroethane	ND	5	ug/L	EPA 8240		
1,1-Dichloroethene	ND	5	ug/L	EPA 8240		
trans-1,2-Dichloroethene	ND	5	ug/L	EPA 8240		
1,2-Dichloropropane	ND	5	ug/L	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
Ethylbenzene	ND	5	ug/L	EPA 8240		
2-Hexanone	ND	10	ug/L	EPA 8240		
Methylene Chloride	ND	5	ug/L	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 8240		
Styrene	ND	5	ug/L	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 8240		
Tetrachloroethene	ND	5	ug/L	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 8240		
Trichloroethene	ND	5	ug/L	EPA 8240		
Toluene	ND	5	ug/L	EPA 8240		
Vinyl acetate	ND	10	ug/L	EPA 8240		
Vinyl chloride	ND	10	ug/L	EPA 8240		
Total Xylenes	ND	5	ug/L	EPA 8240		
d4-Dichloroethane (SURROGATE)	108	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	100	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	100	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/11/94	RVJ
Diesel	620	10	mg/L	EPA 8015 (modified)		

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LABORATORY TESTS RESULTS 08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/06/94

TIME SAMPLED: 15:00

WORK DESCRIPTION: EB-6

LABORATORY I.D.: 941953-0014

DATE RECEIVED: 08/09/94

TIME RECEIVED: 09:20

REMARKS: 1 .5LP-3 voas-Equipment Blank

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Gasoline	<100	100	ug/L	EPA 8015 (modified)	08/11/94	RVJ
Lead (Pb)	<0.050	0.050	mg/L	EPA 6010	08/16/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/11/94	RVJ

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LABORATORY TESTS RESULTS
08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/06/94

TIME SAMPLED: 15:00

WORK DESCRIPTION: FB-2

LABORATORY I.D.: 941953-0015

DATE RECEIVED: 08/09/94

TIME RECEIVED: 09:20

REMARKS: 1 .5LP-3 voas-Field Blank

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 8240	08/15/94	CIS
Acetone	ND	10	ug/L	EPA 8240		
Benzene	ND	5	ug/L	EPA 8240		
Bromodichloromethane	ND	5	ug/L	EPA 8240		
Bromoform	ND	5	ug/L	EPA 8240		
Bromomethane	ND	10	ug/L	EPA 8240		
2-Butanone	ND	10	ug/L	EPA 8240		
Carbon disulfide	52	5	ug/L	EPA 8240		
Carbon tetrachloride	ND	5	ug/L	EPA 8240		
Chlorobenzene	ND	5	ug/L	EPA 8240		
Chlorodibromomethane	ND	5	ug/L	EPA 8240		
Chloroethane	ND	10	ug/L	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 8240		
Chloroform	26	5	ug/L	EPA 8240		
Chloromethane	ND	10	ug/L	EPA 8240		
1,1-Dichloroethane	ND	5	ug/L	EPA 8240		
1,2-Dichloroethane	ND	5	ug/L	EPA 8240		
1,1-Dichloroethene	ND	5	ug/L	EPA 8240		
trans-1,2-Dichloroethene	ND	5	ug/L	EPA 8240		
1,2-Dichloropropane	ND	5	ug/L	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
Ethylbenzene	ND	5	ug/L	EPA 8240		
2-Hexanone	ND	10	ug/L	EPA 8240		
Methylene Chloride	ND	5	ug/L	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 8240		
Styrene	ND	5	ug/L	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 8240		
Tetrachloroethene	ND	5	ug/L	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 8240		
Trichloroethene	ND	5	ug/L	EPA 8240		
Toluene	ND	5	ug/L	EPA 8240		
Vinyl acetate	ND	10	ug/L	EPA 8240		
Vinyl chloride	ND	10	ug/L	EPA 8240		
Total Xylenes	ND	5	ug/L	EPA 8240		
d4-Dichloroethane (SURROGATE)	106	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	100	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	102	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/11/94	RVJ
Diesel	ND	10	mg/L	EPA 8015 (modified)		

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LABORATORY TESTS RESULTS 08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/06/94

TIME SAMPLED: 15:00

WORK DESCRIPTION: FB-2

LABORATORY I.D.: 941953-0015

DATE RECEIVED: 08/09/94

TIME RECEIVED: 09:20

REMARKS: 1 .5LP-3 voas-Field Blank

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Gasoline	<100	100	ug/L	EPA 8015 (modified)	08/11/94	RVJ
Lead (Pb)	<0.050	0.050	mg/L	EPA 6010	08/16/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/11/94	RVJ

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LABORATORY TESTS RESULTS
08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
DATE SAMPLED: / /
TIME SAMPLED: :
WORK DESCRIPTION: Trip Blank

LABORATORY I.D.: 941953-0016
DATE RECEIVED: 08/09/94
TIME RECEIVED: 09:20
REMARKS: 1 vial-CORE DI H2O

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 8240	08/15/94	CIS
Acetone	ND	10	ug/L	EPA 8240		
Benzene	ND	5	ug/L	EPA 8240		
Bromodichloromethane	ND	5	ug/L	EPA 8240		
Bromoform	ND	5	ug/L	EPA 8240		
Bromomethane	ND	10	ug/L	EPA 8240		
2-Butanone	ND	10	ug/L	EPA 8240		
Carbon disulfide	ND	5	ug/L	EPA 8240		
Carbon tetrachloride	ND	5	ug/L	EPA 8240		
Chlorobenzene	ND	5	ug/L	EPA 8240		
Chlorodibromomethane	ND	5	ug/L	EPA 8240		
Chloroethane	ND	10	ug/L	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 8240		
Chloroform	ND	5	ug/L	EPA 8240		
Chloromethane	ND	10	ug/L	EPA 8240		
1,1-Dichloroethane	ND	5	ug/L	EPA 8240		
1,2-Dichloroethane	ND	5	ug/L	EPA 8240		
1,1-Dichloroethene	ND	5	ug/L	EPA 8240		
trans-1,2-Dichloroethene	ND	5	ug/L	EPA 8240		
1,2-Dichloropropane	ND	5	ug/L	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
Ethylbenzene	ND	5	ug/L	EPA 8240		
2-Hexanone	ND	10	ug/L	EPA 8240		
Methylene Chloride	ND	5	ug/L	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 8240		
Styrene	ND	5	ug/L	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 8240		
Tetrachloroethene	ND	5	ug/L	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 8240		
Trichloroethene	ND	5	ug/L	EPA 8240		
Toluene	ND	5	ug/L	EPA 8240		
Vinyl acetate	ND	10	ug/L	EPA 8240		
Vinyl chloride	ND	10	ug/L	EPA 8240		
Total Xylenes	ND	5	ug/L	EPA 8240		
d4-Dichloroethane (SURROGATE)	108	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	100	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	100	0	% Recovery	86-115% QC LIMITS		

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QUALITY ASSURANCE REPORT 08/24/94

JOB NUMBER: 941953 CUSTOMER: Operational Technologies ATTN: John Morris

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY

PARAMETER: Gasoline DATE/TIME ANALYZED: 08/11/94 00:00 QC BATCH NUMBER: 936756
REPORTING LIMIT/DF: 100 UNITS: ug/L METHOD REFERENCE : EPA 8015 (modified) TECHNICIAN: RVJ

BLANK	METHOD	MB081194	<100							
SPIKE	MATRIX	941941-9	1200					0	1000	120
SPIKE	MATRIX DUP	941941-9	1300					0	1000	130

PARAMETER: Gasoline DATE/TIME ANALYZED: 08/15/94 00:00 QC BATCH NUMBER: 936780
REPORTING LIMIT/DF: 100 UNITS: ug/kg METHOD REFERENCE : EPA 8015 (modified) TECHNICIAN: RVJ

BLANK	METHOD	MB081594	<100							
SPIKE	MATRIX	941941-2	840					0	1000	84
SPIKE	MATRIX DUP	941941-2	1000					0	1000	100

PARAMETER: Lead (Pb) DATE/TIME ANALYZED: 08/15/94 16:14 QC BATCH NUMBER: 936803
REPORTING LIMIT/DF: 0.50 UNITS: mg/L METHOD REFERENCE : EPA 7420 TECHNICIAN: EAW

BLANK	ICB	IB081594	<0.50							
BLANK	MB	MB081294	<0.50							
BLANK	CCB	CB081594	<0.50							
BLANK	CCB	CB081594	<0.50							
BLANK	CCB	CB081594	<0.50							
BLANK	CCB	CB081594	<0.50							
BLANK	CCB	CB081594	<0.50							
STANDARD	ICVS	M94010	4.66			5.0	93			
STANDARD	LCS	M94135	1.02			1.0	102			
STANDARD	CCVS	M94009	2.06			2.0	103			
STANDARD	CCVS	M94010	4.71			5.0	94			
STANDARD	CCVS	M94010	4.70			5.0	94			
STANDARD	CCVS	M94010	4.70			5.0	94			
STANDARD	CCVS	M94010	5.04			5.0	101			
STANDARD	CCVS	M94010	5.05			5.0	101			
SPIKE	MATRIX	941990-1	5.16					0	5.0	103
SPIKE	MATRIX	941953-10	0.96					0	1.0	96
SPIKE	MATRIX	941976-6	1.48					0.36	1.0	112
SPIKE	MATRIX	941955-1	1.13					0	1.0	113
DUPLICATE	MS/MSD	941990-1	5.16	5.11	1					
DUPLICATE	MS/MSD	941953-10	0.96	0.93	0.03					
DUPLICATE	MS/MSD	941976-6	1.48	1.68	0.20					
DUPLICATE	MS/MSD	941955-1	1.13	1.09	0.04					

PARAMETER: Lead (Pb) DATE/TIME ANALYZED: 08/16/94 17:00 QC BATCH NUMBER: 936844
REPORTING LIMIT/DF: 0.005 UNITS: mg/L METHOD REFERENCE : EPA 7421 TECHNICIAN: VB

BLANK	ICB	IB081694	<0.005							
BLANK	MB	MB081694	<0.005							
BLANK	CCB	CB081694	<0.005							
BLANK	MB	MB081294	<0.005							
BLANK	CCB	CB081694	<0.005							

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QUALITY ASSURANCE REPORT 08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Lead (Pb)				DATE/TIME ANALYZED:08/16/94 17:00				QC BATCH NUMBER:936844		
REPORTING LIMIT/DF: 0.005 UNITS:mg/L				METHOD REFERENCE :EPA 7421				TECHNICIAN:VB		
BLANK	CCB	CB081694	<0.005							
BLANK	CCB	CB081694	<0.005							
BLANK	CCB	CB081694	<0.005							
STANDARD	ICVS	I40384	0.038			0.050	76			
STANDARD	CCVS	I40384	0.042			0.050	84			
STANDARD	CCVS	I40384	0.053			0.050	106			
STANDARD	CCVS	I40384	0.052			0.050	104			
STANDARD	CCVS	I40384	0.050			0.050	100			
STANDARD	CCVS	I40384	0.112			0.100	112			
SPIKE	MATRIX	941972-1	0.068					0.008	0.050	120
DUPLICATE	MS/MSD	941972-1	0.068	0.069	1					

PARAMETER:Gasoline				DATE/TIME ANALYZED:08/18/94 00:00				QC BATCH NUMBER:936934		
REPORTING LIMIT/DF: 100 UNITS:ug/kg				METHOD REFERENCE :EPA 8015 (modified)				TECHNICIAN:RW		
BLANK	METHOD	MB081894	<100							
SPIKE	MATRIX	941941-2	840					0	1000	84
SPIKE	MATRIX DUP	941941-2	1000					0	1000	100

PARAMETER:Gasoline				DATE/TIME ANALYZED:08/19/94 00:00				QC BATCH NUMBER:936935		
REPORTING LIMIT/DF: 100 UNITS:ug/kg				METHOD REFERENCE :EPA 8015 (modified)				TECHNICIAN:RVJ		
BLANK	METHOD	MB081994	<100							

PARAMETER:Lead (Pb)				DATE/TIME ANALYZED:08/16/94 16:11				QC BATCH NUMBER:936945		
REPORTING LIMIT/DF: 0.050 UNITS:mg/L				METHOD REFERENCE :EPA 6010				TECHNICIAN:VB		
BLANK	ICB	081794	0.084							
BLANK	CCB	081794	<0.050							
BLANK	CCB	081794	<0.050							
BLANK	CCB	081794	<0.050							
STANDARD	ICV	M94267	1.06			1.00	106			
STANDARD	CCV	M94267	0.988			1.00	99			
STANDARD	CCV	M94267	0.913			1.00	91			
STANDARD	CCV	M94267	0.830			1.00	83			
SPIKE	MATRIX	941953-10	88.9					10.9	100	78
SPIKE	MATRIX(c)	941953-10	67.8					10.9	100	57
DUPLICATE	MS/MSD	941953-10	88.9	67.8	27					

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QUALITY ASSURANCE REPORT
08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

Total Petroleum Hydrocarbons

DATE ANALYZED: 08/18/94 TIME ANALYZED: 00:00 METHOD: EPA 8015 (modified) QC NUMBER: 936922

MATRIX SPIKES

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
iesel	MATRIX	941941-2	1	470	0	500	94	10	mg/kg
	MATRIX DUP	941941-2	1	480	0	500	96	10	mg/kg

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QUALITY ASSURANCE REPORT
08/24/94

JOB NUMBER: 941953

CUSTOMER: Operational Technologies

ATTN: John Morris

total Petroleum Hydrocarbons

DATE ANALYZED: 08/16/94 TIME ANALYZED: 00:00 METHOD: EPA 8015 (modified) QC NUMBER: 936923

MATRIX SPIKES

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
iesel	MATRIX	941905-14	1	480	0	500	96	10	mg/kg
	MATRIX DUP	941905-14	1	480	0	500	96	10	mg/kg

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Q U A L I T Y A S S U R A N C E R E P O R T

EPA Method 8240

JOB NUMBER: 941953

DATE ANALYZED: 8/15/94

B L A N K S

TEST DESCRIPTION	ANALYS.SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Acetone	METHOD	081594	1	ND	10	ug/L
Benzene	METHOD	081594	1	ND	5	ug/L
Bromodichloromethane	METHOD	081594	1	ND	5	ug/L
Bromoform	METHOD	081594	1	ND	5	ug/L
Bromomethane	METHOD	081594	1	ND	10	ug/L
2-Butanone	METHOD	081594	1	ND	10	ug/L
Carbon disulfide	METHOD	081594	1	ND	5	ug/L
Carbon tetrachloride	METHOD	081594	1	ND	5	ug/L
Chlorobenzene	METHOD	081594	1	ND	5	ug/L
Chlorodibromomethane	METHOD	081594	1	ND	5	ug/L
Chloroethane	METHOD	081594	1	ND	10	ug/L
2-Chloroethylvinyl ether	METHOD	081594	1	ND	10	ug/L
Chloroform	METHOD	081594	1	ND	5	ug/L
Chloromethane	METHOD	081594	1	ND	10	ug/L
1,1-Dichloroethane	METHOD	081594	1	ND	5	ug/L
1,2-Dichloroethene	METHOD	081594	1	ND	5	ug/L
1,1-Dichloroethene	METHOD	081594	1	ND	5	ug/L
1,2-Dichloroethene (total)	METHOD	081594	1	ND	5	ug/L
1,2-Dichloropropane	METHOD	081594	1	ND	5	ug/L
cis-1,3-Dichloropropene	METHOD	081594	1	ND	5	ug/L
trans-1,3-Dichloropropene	METHOD	081594	1	ND	5	ug/L
Ethylbenzene	METHOD	081594	1	ND	5	ug/L
2-Hexanone	METHOD	081594	1	ND	10	ug/L
Methylene chloride	METHOD	081594	1	ND	5	ug/L
4-Methyl-2-pentanone	METHOD	081594	1	ND	10	ug/L
Styrene	METHOD	081594	1	ND	5	ug/L
1,1,2,2-Tetrachloroethane	METHOD	081594	1	ND	5	ug/L
Tetrachloroethene	METHOD	081594	1	ND	5	ug/L
Toluene	METHOD	081594	1	ND	5	ug/L
1,1,1-Trichloroethane	METHOD	081594	1	ND	5	ug/L
1,1,2-Trichloroethane	METHOD	081594	1	ND	5	ug/L
Trichloroethene	METHOD	081594	1	ND	5	ug/L
Vinyl acetate	METHOD	081594	1	ND	5	ug/L
Vinyl chloride	METHOD	081594	1	ND	10	ug/L
Total xylenes	METHOD	081594	1	ND	5	ug/L
d4-1,2-Dichloroethane (SURROGATE)	METHOD	081594	1	101	76-114	% recovery
d8-Toluene (SURROGATE)	METHOD	081594	1	98	88-110	% recovery
4-Bromofluorobenzene (SURROGATE)	METHOD	081594	1	94	86-115	% recovery

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QUALITY ASSURANCE REPORT

PA Method 8240

JOB NUMBER: 941953

DATE ANALYZED: 8/15/94

MATRIX SPIKES

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	UNITS	PERCENT RECOVERY	RPD	QC LIMITS	
									%REC	RPD
Benzene	MATRIX	941953-16	57	0	50	ug/L	114	0.0	76-127	11
	MATRIX DUP	941953-16	57	0	50	ug/L	114			
Chlorobenzene	MATRIX	941953-16	54	0	50	ug/L	108	0.0	75-130	13
	MATRIX DUP	941953-16	54	0	50	ug/L	108			
1,1-Dichloroethene	MATRIX	941953-16	67	0	50	ug/L	134	2.9	61-145	14
	MATRIX DUP	941953-16	69	0	50	ug/L	138			
Trichloroethene	MATRIX	941953-16	53	0	50	ug/L	106	0.0	71-120	14
	MATRIX DUP	941953-16	53	0	50	ug/L	106			
Toluene	MATRIX	941953-16	54	0	50	ug/L	108	1.8	76-125	13
	MATRIX DUP	941953-16	55	0	50	ug/L	110			
4-Dichloroethane (SURROGATE)	MATRIX	941953-16	51	0	50	ug/L	102	N/A	76-114	N/A
	MATRIX DUP	941953-16	55	0	50	ug/L	110			
m8-Toluene (SURROGATE)	MATRIX	941953-16	50	0	50	ug/L	100	N/A	88-110	N/A
	MATRIX DUP	941953-16	55	0	50	ug/L	110			
m-Bromofluorobenzene (SURROGAT	MATRIX	941953-16	49	0	50	ug/L	98	N/A	86-115	N/A
	MATRIX DUP	941953-16	50	0	50	ug/L	100			

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QUALITY ASSURANCE REPORT

EPA Method 8240

JOB NUMBER: 941953

DATE ANALYZED: 8/12/94

B L A N K S

TEST DESCRIPTION	ANALYS.SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Acetone	METHOD	081294	1	ND	10	ug/kg
Benzene	METHOD	081294	1	ND	5	ug/kg
Bromodichloromethane	METHOD	081294	1	ND	5	ug/kg
Bromoform	METHOD	081294	1	ND	5	ug/kg
Bromomethane	METHOD	081294	1	ND	10	ug/kg
2-Butanone	METHOD	081294	1	ND	10	ug/kg
Carbon disulfide	METHOD	081294	1	ND	5	ug/kg
Carbon tetrachloride	METHOD	081294	1	ND	5	ug/kg
Chlorobenzene	METHOD	081294	1	ND	5	ug/kg
Chlorodibromomethane	METHOD	081294	1	ND	5	ug/kg
Chloroethane	METHOD	081294	1	ND	10	ug/kg
2-Chloroethylvinyl ether	METHOD	081294	1	ND	10	ug/kg
Chloroform	METHOD	081294	1	ND	5	ug/kg
Chloromethane	METHOD	081294	1	ND	10	ug/kg
1,1-Dichloroethane	METHOD	081294	1	ND	5	ug/kg
1,2-Dichloroethene	METHOD	081294	1	ND	5	ug/kg
1,1-Dichloroethene	METHOD	081294	1	ND	5	ug/kg
1,2-Dichloroethene (total)	METHOD	081294	1	ND	5	ug/kg
1,2-Dichloropropane	METHOD	081294	1	ND	5	ug/kg
cis-1,3-Dichloropropene	METHOD	081294	1	ND	5	ug/kg
trans-1,3-Dichloropropene	METHOD	081294	1	ND	5	ug/kg
Ethylbenzene	METHOD	081294	1	ND	5	ug/kg
2-Hexanone	METHOD	081294	1	ND	10	ug/kg
Methylene chloride	METHOD	081294	1	ND	5	ug/kg
4-Methyl-2-pentanone	METHOD	081294	1	ND	10	ug/kg
Styrene	METHOD	081294	1	ND	5	ug/kg
1,1,2,2-Tetrachloroethane	METHOD	081294	1	ND	5	ug/kg
Tetrachloroethene	METHOD	081294	1	ND	5	ug/kg
Toluene	METHOD	081294	1	ND	5	ug/kg
1,1,1-Trichloroethane	METHOD	081294	1	ND	5	ug/kg
1,1,2-Trichloroethane	METHOD	081294	1	ND	5	ug/kg
Trichloroethene	METHOD	081294	1	ND	5	ug/kg
Vinyl acetate	METHOD	081294	1	ND	5	ug/kg
Vinyl chloride	METHOD	081294	1	ND	10	ug/kg
Total xylenes	METHOD	081294	1	ND	5	ug/kg
d4-1,2-Dichloroethane (SURROGATE)	METHOD	081294	1	101	76-114	% recovery
d8-Toluene (SURROGATE)	METHOD	081294	1	100	88-110	% recovery
4-Bromofluorobenzene (SURROGATE)	METHOD	081294	1	96	86-115	% recovery

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QUALITY ASSURANCE REPORT

PA Method 8240

JOB NUMBER: 941953

DATE ANALYZED: 8/9/94

MATRIX SPIKES

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	UNITS	PERCENT RECOVERY	RPD	QC LIMITS	
									%REC	RPD
Benzene	MATRIX	941953-11	65	0	50	ug/kg	130	14.3	66-142	21
Chlorobenzene	MATRIX DUP	941953-11	75	0	50	ug/kg	150			
	MATRIX	941953-11	52	0	50	ug/kg	104	5.6	60-133	21
1,1-Dichloroethene	MATRIX DUP	941953-11	55	0	50	ug/kg	110			
	MATRIX	941953-11	66	0	50	ug/kg	132	8.7	59-172	22
Trichloroethene	MATRIX DUP	941953-11	72	0	50	ug/kg	144			
	MATRIX	941953-11	55	0	50	ug/kg	110	10.3	62-137	24
Toluene	MATRIX DUP	941953-11	61	0	50	ug/kg	122			
	MATRIX	941953-11	64	0	50	ug/kg	128	9.0	59-139	21
1,4-Dichloroethane (SURROGATE)	MATRIX DUP	941953-11	70	0	50	ug/kg	140			
	MATRIX	941953-11	53	0	50	ug/kg	106	N/A	70-121	N/A
o8-Toluene (SURROGATE)	MATRIX DUP	941953-11	56	0	50	ug/kg	112			
	MATRIX	941953-11	52	0	50	ug/kg	104	N/A	84-138	N/A
Bromofluorobenzene (SURROGATE)	MATRIX DUP	941953-11	65	0	50	ug/kg	130			
	MATRIX	941953-11	42	0	50	ug/kg	84	N/A	59-113	N/A
	MATRIX DUP	941953-11	42	0	50	ug/kg	84			

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QUALITY ASSURANCE FOOTER

METHOD REFERENCES

- (1) EPA SW-846, Test Methods for Evaluating Solid Waste, Third Edition, November 1990, and July 1992 update
- (2) Standard Methods for the Examination of Water and Wastewater, 17th Edition, 1989
- (3) EPA 600/4-79-020, Methods of Chemical Analysis for Waters and Wastes, March 1983
- (4) Federal Register, Friday, October 26, 1984 (40 CFR Part 136)
- (5) American Society for Testing and Materials, Volumes 5.01, 5.02, 5.03, 1992
- (6) EPA 600/4-89-001, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Fresh Water Organisms
- (7) EPA 600/4-90-027, Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Fresh Water and Marine Organisms, Fourth Edition

COMMENTS

All methods of chemical analysis have a statistical uncertainty associated with the results. Unless otherwise indicated, the data in this report are within the limits of uncertainty as specified in the referenced method. Quality control acceptance criteria are based either on actual laboratory performance or on limits specified in the referenced method. The date and time of analysis indicated on the QA report may not reflect the actual time of analysis for QC samples. All data reported on an "as received" basis unless otherwise indicated. Data reported in the QA report may be lower than sample data due to dilution of samples into the calibration range of the analysis. Sample concentrations for solid samples are calculated on an as received (wet) basis. Unless otherwise indicated, volatiles by gas chromatography are reported from a single column.

FLAGS, FOOTNOTES, AND ABBREVIATIONS (as needed)

- | | |
|--|--|
| NA = Not analyzed | N.I. = Not Ignitable |
| N/A = Not applicable | S.I. = Sustains Ignition |
| ug/L = Micrograms per liter | I(NS) = Ignites, but does not Sustain Ignition |
| mg/L = Milligrams per liter | RPD = Relative Percent Difference |
| ND = Not detected at a value greater than the reporting limit | |
| NC = Not calculable due to values lower than the detection limit | |
| (a) = Surrogate recoveries were outside acceptable ranges due to matrix effects. | |
| (b) = Surrogate recoveries were not calculated due to dilution of the sample below the detectable range for the surrogate. | |
| (c) = Matrix spike recoveries were outside acceptable ranges due to matrix effects. | |
| (d) = Relative Percent Difference (RPD) for duplicate analysis outside acceptance limits due to actual differences in the sample matrix. | |
| (e) = The limit listed for flammability indicates the upper limit for the test. Samples are not tested at temperatures above 140 Fahrenheit since only samples which will sustain ignition at temperatures below 140 are considered flammable. | |
| (f) = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a diesel standard, however, the hydrocarbon pattern did not match a diesel pattern. | |
| (g) = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a gasoline standard, however, the hydrocarbon pattern did not match a gasoline pattern. | |
| (h) = High dilution due to matrix effects | |
| (i) = Samples with results below 500 mg/L are considered hazardous | |

QC SAMPLE IDENTIFICATIONS

- | | |
|---|-----------------------------------|
| MB = Method Blank | MS = Matrix Spike |
| RB = Reagent Blank | MSD = Matrix Spike Duplicate |
| ICB = Initial Calibration Blank | MD = Matrix Duplicate |
| CCB = Continuing Calibration Blank | RS = Reference Standard |
| SB = Storage Blank | BS = Blank Spike |
| CS = Calibration Standard | SS = Surrogate Spike |
| ICV = Initial Calibration Verification | LCS = Laboratory Control Standard |
| CCV = Continuing Calibration Verification | |

SUBCONTRACTED LABORATORY LOCATIONS

- | | | |
|-------------------------------|------------------------------|-----|
| Core Laboratories: | Aurora, Colorado(ELAP #1933) | *AU |
| | Casper, Wyoming | *CA |
| | Corpus Christi, Texas | *CC |
| | Houston, Texas | *HP |
| | Lake Charles, Louisiana | *LC |
| | Long Beach, California | *LB |
| Aquatic Testing Laboratories: | | |
| | Ventura, California | *AT |

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CORE LABORATORIES
ANALYTICAL REPORT

Job Number: 941966

Prepared For:

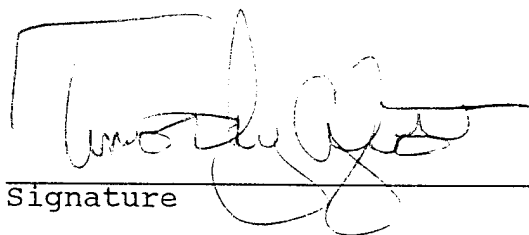
Operational Technologies

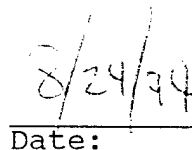
John Morris

4100 NW Loop 410

San Antonio, TX 78289

Date: 08/22/94


Signature


Date:

Name: Timothy A. Scott

Core Laboratories
1250 Gene Autry Way
Anaheim, CA 92805

Title: Laboratory Manager

C A E L A P 1174
L A C S D 10146

Core Laboratories

Case Narrative

Job Number 941966

EPA Method 624

Your samples were analyzed for volatile organics by EPA method 624.

Initial and continuing calibrations met EPA method 8240 acceptance criteria for all SPCC and CCC compounds.

One method blank was analyzed with your samples and met EPA method 8240 acceptance criteria for contamination and surrogate recovery.

Surrogate recoveries met EPA method 8240 acceptance criteria in all samples and spikes.

No sample was designated in this batch to be used for matrix spike and spike duplicate analysis.

The results of the Blank Spike/Blank Spike Dup showed good recoveries indicating that the laboratory was in control.

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Case Narrative

Job Number 941966

EPA METHOD 8015

Your samples were analyzed for gasoline and diesel by modified EPA method 8015.

Initial and continuing calibrations met EPA method 8015 acceptance criteria.

The method blanks analyzed with your samples met EPA method 8015 acceptance criteria for contamination.

No sample was designated in this batch to be used for matrix spike/spike duplicate analysis.

The results of the Blank Spike/Blank Spike Dup showed good recoveries indicating the laboratory was in control.

Core Laboratories**Case Narrative****Job Number 941966****Lead Analysis**

The samples associated with this batch were analyzed for lead by EPA 6010 and 7421 (both technically equivalent to EPA 7420).

All method criteria was within tolerances. No sample was designated in this batch to be used for MS/MSD analysis.

Core Laboratories

LABORATORY TESTS RESULTS

08/22/94

LAB NUMBER: 941966

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/09/94

TIME SAMPLED: 15:20

WORK DESCRIPTION: 05-001 MWA

LABORATORY I.D.: 941966-0001

DATE RECEIVED: 08/10/94

TIME RECEIVED: 10:10

REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 624	08/17/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	91	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	98	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	104	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/20/94	RVJ
Diesel	ND	10	mg/L	EPA 8015 (modified)		

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LABORATORY TESTS RESULTS 08/22/94

JOB NUMBER: 941966

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941966-0001

DATE SAMPLED: 08/09/94

DATE RECEIVED: 08/10/94

TIME SAMPLED: 15:20

TIME RECEIVED: 10:10

WORK DESCRIPTION: 05-001 MWA

REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Gasoline	550	100	ug/L	EPA 8015 (modified)	08/19/94	RVJ
Lead (Pb)	<0.005	0.005	mg/L	EPA 7421	08/16/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/19/94	DC

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Core Laboratories

LABORATORY TESTS RESULTS

08/22/94

JOB NUMBER: 941966

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: / /

TIME SAMPLED:

WORK DESCRIPTION: Trip Blank

LABORATORY I.D.: 941966-0002

DATE RECEIVED: 08/10/94

TIME RECEIVED: 10:10

REMARKS: 1 vial-CORE DI H2O

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 624	08/17/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	88	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	95	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	100	0	% Recovery	86-115% QC LIMITS		

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LABORATORY TESTS RESULTS 08/22/94

JOB NUMBER: 941966

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941966-0003

DATE SAMPLED: 08/09/94

DATE RECEIVED: 08/10/94

TIME SAMPLED: 17:03

TIME RECEIVED: 10:10

WORK DESCRIPTION: 05-001 MWB

REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	COMPLETED	-----	N/A	EPA 3020	08/16/94	ST
Volatile Organics by GC/MS		*1		EPA 624	08/17/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	91	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	95	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	100	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/20/94	RVJ

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LABORATORY TESTS RESULTS

08/22/94

LAB NUMBER: 941966

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/09/94

TIME SAMPLED: 17:03

WORK DESCRIPTION: 05-001 MWB

LABORATORY I.D.: 941966-0003

DATE RECEIVED: 08/10/94

TIME RECEIVED: 10:10

REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/L	EPA 8015 (modified)		
Gasoline	160	100	ug/L	EPA 8015 (modified)	08/19/94	RVJ
Lead (Pb)	<0.005	0.005	mg/L	EPA 7421	08/16/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/19/94	DC

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LABORATORY TESTS RESULTS 08/22/94

JOB NUMBER: 941966

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941966-0004

DATE SAMPLED: 08/09/94

DATE RECEIVED: 08/10/94

TIME SAMPLED: 18:40

TIME RECEIVED: 10:10

WORK DESCRIPTION: Field Blank

REMARKS: 1 .5LP-/3 voas-field blank

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 624	08/17/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	91	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	98	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	104	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/20/94	RVJ
Diesel	ND	10	mg/L	EPA 8015 (modified)		

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LABORATORY TESTS RESULTS
08/22/94

JOB NUMBER: 941966

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
DATE SAMPLED: 08/09/94
TIME SAMPLED: 18:40
WORK DESCRIPTION: Field Blank

LABORATORY I.D.: 941966-0004
DATE RECEIVED: 08/10/94
TIME RECEIVED: 10:10
REMARKS: 1 .5LP-/3 voas-field blank

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Gasoline	<100	100	ug/L	EPA 8015 (modified)	08/19/94	RVJ
Lead (Pb)	<1.0	1.0	mg/L	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/19/94	DC

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LABORATORY TESTS RESULTS 08/22/94

JOB NUMBER: 941966

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941966-0005

DATE SAMPLED: 08/09/94

DATE RECEIVED: 08/10/94

TIME SAMPLED: 18:40

TIME RECEIVED: 10:10

WORK DESCRIPTION: Equipment Blank

REMARKS: 1 .5LP-/3 voas-equip blank

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 624	08/17/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	90	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	96	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	97	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/20/94	RVJ
Diesel	ND	10	mg/L	EPA 8015 (modified)		

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LABORATORY TESTS RESULTS

08/22/94

LAB NUMBER: 941966

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
 DATE SAMPLED: 08/09/94
 TIME SAMPLED: 18:40
 WORK DESCRIPTION: Equipment Blank

LABORATORY I.D.: 941966-0005
 DATE RECEIVED: 08/10/94
 TIME RECEIVED: 10:10
 REMARKS: 1 .5LP-/3 voas-equip blank

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Gasoline	<100	100	ug/L	EPA 8015 (modified)	08/19/94	RVJ
Lead (Pb)	<1.0	1.0	mg/L	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/19/94	DC

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Core Laboratories

QUALITY ASSURANCE REPORT 08/22/94

JOB NUMBER: 941966

CUSTOMER: Operational Technologies

ATTN: John Morris

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Lead (Pb)				DATE/TIME ANALYZED: 08/16/94 17:00				QC BATCH NUMBER: 936844		
REPORTING LIMIT/DF: 0.005 UNITS:mg/L				METHOD REFERENCE :EPA 7421				TECHNICIAN:VB		
BLANK	ICB	1B081694	<0.005							
BLANK	MB	MB081694	<0.005							
BLANK	CCB	CB081694	<0.005							
BLANK	MB	MB081294	<0.005							
BLANK	CCB	CB081694	<0.005							
BLANK	CCB	CB081694	<0.005							
BLANK	CCB	CB081694	<0.005							
STANDARD	ICVS	140384	0.038			0.050	76			
STANDARD	CCVS	140384	0.042			0.050	84			
STANDARD	CCVS	140384	0.053			0.050	106			
STANDARD	CCVS	140384	0.052			0.050	104			
STANDARD	CCVS	140384	0.050			0.050	100			
STANDARD	CCVS	140384	0.112			0.100	112			
SPIKE	MATRIX	941972-1	0.068					0.008	0.050	120
DUPLICATE	MS/MSD	941972-1	0.068	0.069	1					

PARAMETER: Gasoline
REPORTING LIMIT/DF: 100 UNITS:ug/L
DATE/TIME ANALYZED: 08/19/94 00:00
METHOD REFERENCE :EPA 8015 (modified)
QC BATCH NUMBER: 936936
TECHNICIAN:RVJ

BLANK	METHOD	MB081994	<100							
SPIKE	MATRIX	941941-9	1200					0	1000	120
SPIKE	MATRIX DUP	941941-9	1300					0	1000	130

PARAMETER: Lead (Pb)
REPORTING LIMIT/DF: 0.100 UNITS:mg/L
DATE/TIME ANALYZED: 08/19/94 13:54
METHOD REFERENCE :EPA 6010
QC BATCH NUMBER: 936963
TECHNICIAN:VB

BLANK	ICB	081994	<0.100							
BLANK	CCB	081994	<0.100							
BLANK	CCB	081994	<0.100							
BLANK	MB	081794MB	<0.100							
BLANK	CCB	081994	0.111							
STANDARD	ICV	M94267	1.06			1.00	106			
STANDARD	CCV	M94267	1.14			1.00	114			
STANDARD	CCV	M94267	0.964			1.00	96			
STANDARD	LCS	081794LCS	0.859			1.00	86			
STANDARD	CCV	M94267	0.914			1.00	91			
STANDARD	CCV	M94267	0.995			1.00	100			
SPIKE	MATRIX	941941-7	102					9.8	100	92
SPIKE	MATRIX	941941-7	105					9.8	100	95
SPIKE	MATRIX	941941-3	106					0	100	106
SPIKE	MATRIX	941941-4	96.8					0	100	97
SPIKE	MATRIX	941979-8	97.7					0.74	100	97
SPIKE	MATRIX	941979-8	99.0					0.74	100	98
DUPLICATE	MS/MSD	941941-3	106	96.8	9					
DUPLICATE	MS/MSD	941941-7	102	105	3					

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Core Laboratories

QUALITY ASSURANCE REPORT
08/22/94

JOB NUMBER: 941966

CUSTOMER: Operational Technologies

ATTN: John Morris

Total Petroleum Hydrocarbons

DATE ANALYZED: 08/20/94 TIME ANALYZED: 00:00 METHOD: EPA 8015 (modified) QC NUMBER:936960

MATRIX SPIKES

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Diesel	MATRIX	941849-18	1	390	0	500	78	10	mg/L
	MATRIX DUP	941849-18	1	400	0	500	80	10	mg/L

1250 Gene Autry Way
Anaheim, CA 92805
(714) 937-1094

Core Laboratories
Q U A L I T Y A S S U R A N C E R E P O R T

EPA Method 624

JOB NUMBER: 941966

DATE ANALYZED: 8/17/94

B L A N K S

TEST DESCRIPTION	ANALYS.SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Acetone	METHOD	081794	1	ND	10	ug/L
Benzene	METHOD	081794	1	ND	5	ug/L
Bromodichloromethane	METHOD	081794	1	ND	5	ug/L
Bromoform	METHOD	081794	1	ND	5	ug/L
Bromomethane	METHOD	081794	1	ND	10	ug/L
2-Butanone	METHOD	081794	1	ND	10	ug/L
Carbon disulfide	METHOD	081794	1	ND	5	ug/L
Carbon tetrachloride	METHOD	081794	1	ND	5	ug/L
Chlorobenzene	METHOD	081794	1	ND	5	ug/L
Chlorodibromomethane	METHOD	081794	1	ND	5	ug/L
Chloroethane	METHOD	081794	1	ND	10	ug/L
2-Chloroethylvinyl ether	METHOD	081794	1	ND	10	ug/L
Chloroform	METHOD	081794	1	ND	5	ug/L
Chloromethane	METHOD	081794	1	ND	10	ug/L
1,1-Dichloroethane	METHOD	081794	1	ND	5	ug/L
1,2-Dichloroethene	METHOD	081794	1	ND	5	ug/L
1,1-Dichloroethene	METHOD	081794	1	ND	5	ug/L
1,2-Dichloroethene (total)	METHOD	081794	1	ND	5	ug/L
1,2-Dichloropropane	METHOD	081794	1	ND	5	ug/L
cis-1,3-Dichloropropene	METHOD	081794	1	ND	5	ug/L
trans-1,3-Dichloropropene	METHOD	081794	1	ND	5	ug/L
Ethylbenzene	METHOD	081794	1	ND	5	ug/L
2-Hexanone	METHOD	081794	1	ND	10	ug/L
Methylene chloride	METHOD	081794	1	ND	15	ug/L
4-Methyl-2-pentanone	METHOD	081794	1	ND	10	ug/L
Styrene	METHOD	081794	1	ND	5	ug/L
1,1,2,2-Tetrachloroethane	METHOD	081794	1	ND	5	ug/L
Tetrachloroethene	METHOD	081794	1	ND	5	ug/L
Toluene	METHOD	081794	1	ND	5	ug/L
1,1,1-Trichloroethane	METHOD	081794	1	ND	5	ug/L
1,1,2-Trichloroethane	METHOD	081794	1	ND	5	ug/L
Trichloroethene	METHOD	081794	1	ND	5	ug/L
Vinyl acetate	METHOD	081794	1	ND	5	ug/L
Vinyl chloride	METHOD	081794	1	ND	10	ug/L
Total xylenes	METHOD	081794	1	ND	5	ug/L
d4-1,2-Dichloroethane (SURROGATE)	METHOD	081794	1	102	76-114	% recovery
d8-Toluene (SURROGATE)	METHOD	081794	1	102	88-110	% recovery
4-Bromofluorobenzene (SURROGATE)	METHOD	081794	1	104	86-115	% recovery

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Core Laboratories
QUALITY ASSURANCE REPORT

PA Method 624

JOB NUMBER: 941966

DATE ANALYZED: 8/17/94

MATRIX SPIKES

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	UNITS	PERCENT RECOVERY	RPD	QC LIMITS %REC RPD	
Benzene	MATRIX	941953-16	57	0	50	ug/L	114	0.0	76-127	11
	MATRIX DUP	941953-16	57	0	50	ug/L	114			
Chlorobenzene	MATRIX	941953-16	54	0	50	ug/L	108	1.8	75-130	13
	MATRIX DUP	941953-16	55	0	50	ug/L	110			
1,1-Dichloroethene	MATRIX	941953-16	67	0	50	ug/L	134	2.9	61-145	14
	MATRIX DUP	941953-16	69	0	50	ug/L	138			
Trichloroethene	MATRIX	941953-16	54	0	50	ug/L	108	1.9	71-120	14
	MATRIX DUP	941953-16	53	0	50	ug/L	106			
Toluene	MATRIX	941953-16	55	0	50	ug/L	110	0.0	76-125	13
	MATRIX DUP	941953-16	55	0	50	ug/L	110			
1,4-Dichloroethane (SURROGATE)	MATRIX	941953-16	51	0	50	ug/L	102	N/A	76-114	N/A
	MATRIX DUP	941953-16	55	0	50	ug/L	110			
1,8-Toluene (SURROGATE)	MATRIX	941953-16	50	0	50	ug/L	100	N/A	88-110	N/A
	MATRIX DUP	941953-16	50	0	50	ug/L	100			
1,4-Bromofluorobenzene (SURROGATE)	MATRIX	941953-16	49	0	50	ug/L	98	N/A	86-115	N/A
	MATRIX DUP	941953-16	50	0	50	ug/L	100			

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QUALITY ASSURANCE FOOTER

METHOD REFERENCES

- (1) EPA SW-846, Test Methods for Evaluating Solid Waste, Third Edition, November 1990, and July 1992 update
- (2) Standard Methods for the Examination of Water and Wastewater, 17th Edition, 1989
- (3) EPA 600/4-79-020, Methods of Chemical Analysis for Waters and Wastes, March 1983
- (4) Federal Register, Friday, October 26, 1984 (40 CFR Part 136)
- (5) American Society for Testing and Materials, Volumes 5.01, 5.02, 5.03, 1992
- (6) EPA 600/4-89-001, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Fresh Water Organisms
- (7) EPA 600/4-90-027, Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Fresh Water and Marine Organisms, Fourth Edition

COMMENTS

All methods of chemical analysis have a statistical uncertainty associated with the results. Unless otherwise indicated, the data in this report are within the limits of uncertainty as specified in the referenced method. Quality control acceptance criteria are based either on actual laboratory performance or on limits specified in the referenced method. The date and time of analysis indicated on the QA report may not reflect the actual time of analysis for QC samples. All data reported on an "as received" basis unless otherwise indicated. Data reported in the QA report may be lower than sample data due to dilution of samples into the calibration range of the analysis. Sample concentrations for solid samples are calculated on an as received (wet) basis. Unless otherwise indicated, volatiles by gas chromatography are reported from a single column.

FLAGS, FOOTNOTES, AND ABBREVIATIONS (as needed)

- | | |
|--|--|
| NA = Not analyzed | N.I. = Not Ignitable |
| N/A = Not applicable | S.I. = Sustains Ignition |
| ug/L = Micrograms per liter | I(NS) = Ignites, but does not Sustain Ignition |
| mg/L = Milligrams per liter | RPD = Relative Percent Difference |
| ND = Not detected at a value greater than the reporting limit | |
| NC = Not calculable due to values lower than the detection limit | |
| (a) = Surrogate recoveries were outside acceptable ranges due to matrix effects. | |
| (b) = Surrogate recoveries were not calculated due to dilution of the sample below the detectable range for the surrogate. | |
| (c) = Matrix spike recoveries were outside acceptable ranges due to matrix effects. | |
| (d) = Relative Percent Difference (RPD) for duplicate analysis outside acceptance limits due to actual differences in the sample matrix. | |
| (e) = The limit listed for flammability indicates the upper limit for the test. Samples are not tested at temperatures above 140 Fahrenheit since only samples which will sustain ignition at temperatures below 140 are considered flammable. | |
| (f) = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a diesel standard, however, the hydrocarbon pattern did not match a diesel pattern. | |
| (g) = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a gasoline standard, however, the hydrocarbon pattern did not match a gasoline pattern. | |
| (h) = High dilution due to matrix effects | |
| (i) = Samples with results below 500 mg/L are considered hazardous | |

QC SAMPLE IDENTIFICATIONS

- | | |
|---|-----------------------------------|
| MB = Method Blank | MS = Matrix Spike |
| RB = Reagent Blank | MSD = Matrix Spike Duplicate |
| ICB = Initial Calibration Blank | MD = Matrix Duplicate |
| CCB = Continuing Calibration Blank | RS = Reference Standard |
| SB = Storage Blank | BS = Blank Spike |
| CS = Calibration Standard | SS = Surrogate Spike |
| ICV = Initial Calibration Verification | LCS = Laboratory Control Standard |
| CCV = Continuing Calibration Verification | |

SUBCONTRACTED LABORATORY LOCATIONS

- | | | |
|-------------------------------|------------------------------|-----|
| Core Laboratories: | Aurora, Colorado(ELAP #1933) | *AU |
| | Casper, Wyoming | *CA |
| | Corpus Christi, Texas | *CC |
| | Houston, Texas | *HP |
| | Lake Charles, Louisiana | *LC |
| | Long Beach, California | *LB |
| Aquatic Testing Laboratories: | Ventura, California | *AT |

Core Laboratories

CORE LABORATORIES
ANALYTICAL REPORT

Job Number: 941979

Prepared For:

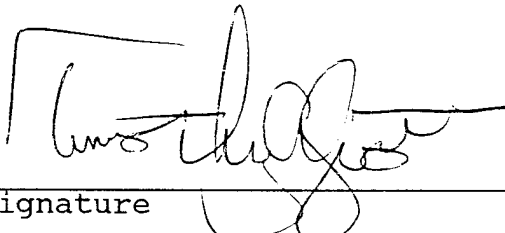
Operational Technologies

John Morris

4100 NW Loop 410

San Antonio, TX 78289

Date: 08/22/94


Signature

8/24/94
Date:

Name: Timothy A. Scott

Core Laboratories
1250 Gene Autry Way
Anaheim, CA 92805

Title: Laboratory Manager

C.A.E.L.A.P. 1174
L.A.C.S.D. 10146

Core Laboratories**Case Narrative****Job Number 941979****Lead Analysis**

The samples associated with this batch were analyzed for lead by EPA 6010 (technically equivalent to EPA 7420).

All method criteria was within tolerances. No sample was designated in this batch to be used for MS/MSD analysis.

Core Laboratories**Case Narrative****Job Number 941979****EPA Method 624**

Your samples were analyzed for volatile organics by EPA method 624.

Initial and continuing calibrations met EPA method 8240 acceptance criteria for all SPCC and CCC compounds.

One method blank was analyzed with your samples and met EPA method 8240 acceptance criteria for contamination and surrogate recovery.

Surrogate recoveries met EPA method 8240 acceptance criteria in all samples and spikes.

No sample was designated in this batch to be used for matrix spike and spike duplicate analysis.

The results of the Blank Spike/Blank Spike Dup showed good recoveries indicating that the laboratory was in control.

Core Laboratories

Case Narrative

Job Number 941979

EPA METHOD 8015

Your samples were analyzed for gasoline and diesel by modified EPA method 8015.

Initial and continuing calibrations met EPA method 8015 acceptance criteria.

The method blanks analyzed with your samples met EPA method 8015 acceptance criteria for contamination.

No sample was designated in this batch to be used for matrix spike/spike duplicate analysis.

The results of the Blank Spike/Blank Spike Dup showed good recoveries indicating the laboratory was in control.

Core Laboratories

LABORATORY TESTS RESULTS 08/22/94

JOB NUMBER: 941979

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/10/94

TIME SAMPLED: 09:07

WORK DESCRIPTION: 04-001 MW A

LABORATORY I.D.: 941979-0001

DATE RECEIVED: 08/11/94

TIME RECEIVED: 10:15

REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	COMPLETED	-----	N/A	EPA 3020	08/16/94	ST
Volatile Organics by GC/MS		*1		EPA 624	08/18/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	99	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	100	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	100	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/20/94	RVJ

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LABORATORY TESTS RESULTS 08/22/94

JOB NUMBER: 941979

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941979-0001

DATE SAMPLED: 08/10/94

DATE RECEIVED: 08/11/94

TIME SAMPLED: 09:07

TIME RECEIVED: 10:15

WORK DESCRIPTION: 04-001 MW A

REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/L	EPA 8015 (modified)		
Gasoline	<100	100	ug/L	EPA 8015 (modified)	08/19/94	RVJ
Lead (Pb)	<1.0	1.0	mg/L	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/19/94	DC

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LABORATORY TESTS RESULTS 08/22/94

JOB NUMBER: 941979

CUSTOMER: Operational Technologies

ATTN: John Morris

TEST I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/10/94

TIME SAMPLED: 10:01

WORK DESCRIPTION: 04-002 MW B

LABORATORY I.D.: 941979-0002

DATE RECEIVED: 08/11/94

TIME RECEIVED: 10:15

REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	COMPLETED	----	N/A	EPA 3020	08/16/94	ST
Volatile Organics by GC/MS		*1		EPA 624	08/18/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	94	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	99	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	98	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/20/94	RVJ

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LABORATORY TESTS RESULTS 08/22/94

JOB NUMBER: 941979

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941979-0002

DATE SAMPLED: 08/10/94

DATE RECEIVED: 08/11/94

TIME SAMPLED: 10:01

TIME RECEIVED: 10:15

WORK DESCRIPTION: 04-002 MW B

REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/L	EPA 8015 (modified)		
Gasoline	<100	100	ug/L	EPA 8015 (modified)	08/19/94	RVJ
Lead (Pb)	<1.0	1.0	mg/L	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/19/94	DC

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LABORATORY TESTS RESULTS

08/22/94

JOB NUMBER: 941979

CUSTOMER: Operational Technologies

ATTN: John Morris

IDENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/10/94

TIME SAMPLED: 12:30

WORK DESCRIPTION: BG-001 MW A

LABORATORY I.D.: 941979-0003

DATE RECEIVED: 08/11/94

TIME RECEIVED: 10:15

REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	COMPLETED	-----	N/A	EPA 3020	08/16/94	ST
Volatile Organics by GC/MS		*1		EPA 624	08/18/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	94	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	94	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	100	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/20/94	RVJ

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LABORATORY TESTS RESULTS

08/22/94

JOB NUMBER: 941979

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941979-0003

DATE SAMPLED: 08/10/94

DATE RECEIVED: 08/11/94

TIME SAMPLED: 12:30

TIME RECEIVED: 10:15

WORK DESCRIPTION: BG-001 MW A

REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/L	EPA 8015 (modified)		
Gasoline	<100	100	ug/L	EPA 8015 (modified)	08/19/94	RVJ
Lead (Pb)	<1.0	1.0	mg/L	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/19/94	DC

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LABORATORY TESTS RESULTS
08/22/94

JOB NUMBER: 941979

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941979-0004

DATE SAMPLED: 08/10/94

DATE RECEIVED: 08/11/94

TIME SAMPLED: 12:37

TIME RECEIVED: 10:15

WORK DESCRIPTION: BG-001 MW A DUP

REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	COMPLETED	-----	N/A	EPA 3020	08/16/94	ST
Volatile Organics by GC/MS		*1		EPA 624	08/18/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	101	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	99	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	100	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/20/94	RVJ

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LABORATORY TESTS RESULTS 08/22/94

JOB NUMBER: 941979

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941979-0004

DATE SAMPLED: 08/10/94

DATE RECEIVED: 08/11/94

TIME SAMPLED: 12:37

TIME RECEIVED: 10:15

WORK DESCRIPTION: BG-001 MW A DUP

REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/L	EPA 8015 (modified)		
Gasoline	<100	100	ug/L	EPA 8015 (modified)	08/19/94	RVJ
Lead (Pb)	6.7	1.0	mg/L	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/19/94	DC

1250 Gene Autry Way
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LABORATORY TESTS RESULTS

08/22/94

LAB NUMBER: 941979

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
 DATE SAMPLED: 08/10/94
 TIME SAMPLED: 17:28
 WORK DESCRIPTION: 04-002 MW A

LABORATORY I.D.: 941979-0005
 DATE RECEIVED: 08/11/94
 TIME RECEIVED: 10:15
 REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	COMPLETED	-----	N/A	EPA 3020	08/16/94	ST
Volatile Organics by GC/MS		*1		EPA 624	08/18/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	98	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	99	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	102	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/20/94	RVJ

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LABORATORY TESTS RESULTS

08/22/94

JOB NUMBER: 941979

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941979-0005

DATE SAMPLED: 08/10/94

DATE RECEIVED: 08/11/94

TIME SAMPLED: 17:28

TIME RECEIVED: 10:15

WORK DESCRIPTION: 04-002 MW A

REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/L	EPA 8015 (modified)		
Gasoline	1000	100	ug/L	EPA 8015 (modified)	08/19/94	RVJ
Lead (Pb)	8.3	1.0	mg/L	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/19/94	DC

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LABORATORY TESTS RESULTS

08/22/94

JOB NUMBER: 941979

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/10/94

TIME SAMPLED: 13:40

WORK DESCRIPTION: BG-001 MW B

LABORATORY I.D.: 941979-0006

DATE RECEIVED: 08/11/94

TIME RECEIVED: 10:15

REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	COMPLETED	-----	N/A	EPA 3020	08/16/94	ST
Volatile Organics by GC/MS		*1		EPA 624	08/18/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	96	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	94	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	100	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/20/94	RVJ

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LABORATORY TESTS RESULTS

08/22/94

JOB NUMBER: 941979

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941979-0006

DATE SAMPLED: 08/10/94

DATE RECEIVED: 08/11/94

TIME SAMPLED: 13:40

TIME RECEIVED: 10:15

WORK DESCRIPTION: BG-001 MW B

REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/L	EPA 8015 (modified)		
Gasoline	250	100	ug/L	EPA 8015 (modified)	08/19/94	RVJ
Lead (Pb)	<1.0	1.0	mg/L	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/19/94	DC

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LABORATORY TESTS RESULTS

08/22/94

JOB NUMBER: 941979

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
 DATE SAMPLED: 08/10/94
 TIME SAMPLED: 16:00
 WORK DESCRIPTION: FB-2

LABORATORY I.D.: 941979-0007
 DATE RECEIVED: 08/11/94
 TIME RECEIVED: 10:15
 REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	N/A	-----	N/A	EPA 3020	N/A	N/A
Volatile Organics by GC/MS		*1		EPA 624	08/18/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	91	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	97	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	100	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/20/94	RVJ

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LABORATORY TESTS RESULTS 08/22/94

JOB NUMBER: 941979

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941979-0007

DATE SAMPLED: 08/10/94

DATE RECEIVED: 08/11/94

TIME SAMPLED: 16:00

TIME RECEIVED: 10:15

WORK DESCRIPTION: FB-2

REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/L	EPA 8015 (modified)		
Gasoline	100	100	ug/L	EPA 8015 (modified)	08/19/94	RVJ
Lead (Pb)	<1.0	1.0	mg/L	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/19/94	DC

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LABORATORY TESTS RESULTS

08/22/94

TEST NUMBER: 941979

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941979-0008

DATE SAMPLED: 08/10/94

DATE RECEIVED: 08/11/94

TIME SAMPLED: 15:52

TIME RECEIVED: 10:15

WORK DESCRIPTION: EB-2

REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	N/A	-----	N/A	EPA 3020	N/A	N/A
Volatile Organics by GC/MS		*1		EPA 624	08/18/94	CIS
Acetone	11	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	14	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	94	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	93	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	99	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/20/94	RVJ

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LABORATORY TESTS RESULTS

08/22/94

JOB NUMBER: 941979

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/10/94

TIME SAMPLED: 15:52

WORK DESCRIPTION: EB-2

LABORATORY I.D.: 941979-0008

DATE RECEIVED: 08/11/94

TIME RECEIVED: 10:15

REMARKS: 1 .5LP-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/L	EPA 8015 (modified)		
Gasoline	<100	100	ug/L	EPA 8015 (modified)	08/19/94	RVJ
Lead (Pb)	7.4	1.0	mg/L	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/19/94	DC

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LABORATORY TESTS RESULTS

08/22/94

JOB NUMBER: 941979

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941979-0009

DATE SAMPLED: / /

DATE RECEIVED: 08/11/94

TIME SAMPLED: :

TIME RECEIVED: 10:15

WORK DESCRIPTION: TRIP BLANK

REMARKS: 1 via vial-CORE DI H2O

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 624	08/18/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	93	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	94	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	101	0	% Recovery	86-115% QC LIMITS		

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Core Laboratories

QUALITY ASSURANCE REPORT

08/22/94

JOB NUMBER: 941979

CUSTOMER: Operational Technologies

ATTN: John Morris

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Gasoline				DATE/TIME ANALYZED: 08/19/94 00:00				QC BATCH NUMBER: 936936		
REPORTING LIMIT/DF: 100 UNITS: ug/L				METHOD REFERENCE :EPA 8015 (modified)				TECHNICIAN: RVJ		
BLANK SPIKE	METHOD	MB081994	<100					0	1000	120
SPIKE	MATRIX	941941-9	1200					0	1000	130
SPIKE	MATRIX DUP	941941-9	1300							

PARAMETER: Lead (Pb)				DATE/TIME ANALYZED: 08/19/94 13:54				QC BATCH NUMBER: 936963		
REPORTING LIMIT/DF: 0.100 UNITS: mg/L				METHOD REFERENCE :EPA 6010				TECHNICIAN: VB		

BLANK	ICB	081994	<0.100							
BLANK	CCB	081994	<0.100							
BLANK	CCB	081994	<0.100							
BLANK	MB	081794MB	<0.100							
BLANK	CCB	081994	0.111							
STANDARD	ICV	M94267	1.06			1.00	106			
STANDARD	CCV	M94267	1.14			1.00	114			
STANDARD	CCV	M94267	0.964			1.00	96			
STANDARD	LCS	081794LCS	0.859			1.00	86			
STANDARD	CCV	M94267	0.914			1.00	91			
STANDARD	CCV	M94267	0.995			1.00	100			
SPIKE	MATRIX	941941-7	102					9.8	100	92
SPIKE	MATRIX	941941-7	105					9.8	100	95
SPIKE	MATRIX	941941-3	106					0	100	106
SPIKE	MATRIX	941941-4	96.8					0	100	97
SPIKE	MATRIX	941979-8	97.7					0.74	100	97
SPIKE	MATRIX	941979-8	99.0					0.74	100	98
DUPLICATE	MS/MSD	941941-3	106	96.8	9					
DUPLICATE	MS/MSD	941941-7	102	105	3					
DUPLICATE	MS/MSD	941979-8	977	990	1					

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QUALITY ASSURANCE REPORT

PA Method 624

JOB NUMBER: 941979

DATE ANALYZED: 8/18/94

B L A N K S

TEST DESCRIPTION	ANALYS.SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Acetone	METHOD	081894	1	ND	10	ug/L
Benzene	METHOD	081894	1	ND	5	ug/L
Bromodichloromethane	METHOD	081894	1	ND	5	ug/L
Bromoform	METHOD	081894	1	ND	5	ug/L
Bromomethane	METHOD	081894	1	ND	10	ug/L
2-Butanone	METHOD	081894	1	ND	10	ug/L
Carbon disulfide	METHOD	081894	1	ND	5	ug/L
Carbon tetrachloride	METHOD	081894	1	ND	5	ug/L
Chlorobenzene	METHOD	081894	1	ND	5	ug/L
Chlorodibromomethane	METHOD	081894	1	ND	5	ug/L
Chloroethane	METHOD	081894	1	ND	10	ug/L
1-Chloroethylvinyl ether	METHOD	081894	1	ND	10	ug/L
Chloroform	METHOD	081894	1	ND	5	ug/L
Chloromethane	METHOD	081894	1	ND	10	ug/L
1,1-Dichloroethane	METHOD	081894	1	ND	5	ug/L
1,2-Dichloroethene	METHOD	081894	1	ND	5	ug/L
1,1-Dichloroethene	METHOD	081894	1	ND	5	ug/L
1,2-Dichloroethene (total)	METHOD	081894	1	ND	5	ug/L
1,2-Dichloropropane	METHOD	081894	1	ND	5	ug/L
cis-1,3-Dichloropropene	METHOD	081894	1	ND	5	ug/L
trans-1,3-Dichloropropene	METHOD	081894	1	ND	5	ug/L
Ethylbenzene	METHOD	081894	1	ND	5	ug/L
2-Hexanone	METHOD	081894	1	ND	10	ug/L
Methylene chloride	METHOD	081894	1	ND	15	ug/L
4-Methyl-2-pentanone	METHOD	081894	1	ND	10	ug/L
Styrene	METHOD	081894	1	ND	5	ug/L
1,1,2,2-Tetrachloroethane	METHOD	081894	1	ND	5	ug/L
Tetrachloroethene	METHOD	081894	1	ND	5	ug/L
Toluene	METHOD	081894	1	ND	5	ug/L
1,1,1-Trichloroethane	METHOD	081894	1	ND	5	ug/L
1,1,2-Trichloroethane	METHOD	081894	1	ND	5	ug/L
Trichloroethene	METHOD	081894	1	ND	5	ug/L
Vinyl acetate	METHOD	081894	1	ND	5	ug/L
Vinyl chloride	METHOD	081894	1	ND	10	ug/L
Total xylenes	METHOD	081894	1	ND	5	ug/L
1,1,2-Dichloroethane (SURROGATE)	METHOD	081894	1	88	76-114	% recovery
m-Toluene (SURROGATE)	METHOD	081894	1	95	88-110	% recovery
4-Bromofluorobenzene (SURROGATE)	METHOD	081894	1	97	86-115	% recovery

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Q U A L I T Y A S S U R A N C E R E P O R T

EPA Method 624

JOB NUMBER: 941979

DATE ANALYZED: 8/18/94

M A T R I X S P I K E S

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	UNITS	PERCENT RECOVERY	RPD	QC LIMITS	
									%REC	RPD
Benzene	MATRIX	941953-16	57	0	50	ug/L	114	0.0	76-127	11
	MATRIX DUP	941953-16	57	0	50	ug/L	114			
Chlorobenzene	MATRIX	941953-16	54	0	50	ug/L	108	1.8	75-130	13
	MATRIX DUP	941953-16	55	0	50	ug/L	110			
1,1-Dichloroethene	MATRIX	941953-16	67	0	50	ug/L	134	2.9	61-145	14
	MATRIX DUP	941953-16	69	0	50	ug/L	138			
Trichloroethene	MATRIX	941953-16	54	0	50	ug/L	108	1.9	71-120	14
	MATRIX DUP	941953-16	53	0	50	ug/L	106			
Toluene	MATRIX	941953-16	55	0	50	ug/L	110	0.0	76-125	13
	MATRIX DUP	941953-16	55	0	50	ug/L	110			
d4-Dichloroethane (SURROGATE)	MATRIX	941953-16	51	0	50	ug/L	102	N/A	76-114	N/A
	MATRIX DUP	941953-16	55	0	50	ug/L	110			
d8-Toluene (SURROGATE)	MATRIX	941953-16	50	0	50	ug/L	100	N/A	88-110	N/A
	MATRIX DUP	941953-16	50	0	50	ug/L	100			
4-Bromofluorobenzene (SURROGAT	MATRIX	941953-16	49	0	50	ug/L	98	N/A	86-115	N/A
	MATRIX DUP	941953-16	50	0	50	ug/L	100			

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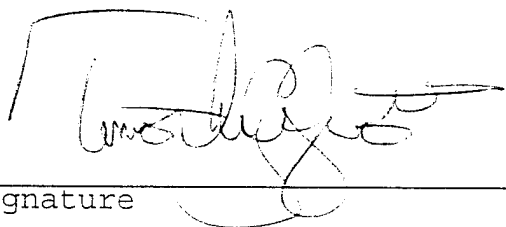
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CORE LABORATORIES
ANALYTICAL REPORT

Job Number: 941987
Prepared For:

Operational Technologies
John Morris
4100 NW Loop 410
San Antonio, TX 78289

Date: 08/23/94


Signature


Date:

Name: Timothy A. Scott

Core Laboratories
1250 Gene Autry Way
Anaheim, CA 92805

Title: Laboratory Manager

C.A.E.L.A.P. 1174
L.A.C.S.D. 10146

Core Laboratories

Case Narrative

Job Number 941987

EPA METHOD 8240

Your samples were analyzed for volatile organics by EPA method 8240.

Initial and continuing calibrations met EPA method 8240 acceptance criteria for all SPCC and CCC compounds.

One method blank was analyzed with your samples and met EPA method 8240 acceptance criteria for contamination and surrogate recovery.

Surrogate recoveries met EPA method 8240 acceptance criteria in all samples and spikes with the following exceptions: Samples 941987-3 and 4 had high recovery for 4-BFB. Re-analysis gave similar results.

No sample was designated in this batch to be used for matrix spike and spike duplicate analysis.

The results of the Blank Spike/Blank Spike Dup showed good recoveries indicating the laboratory was in control.

Core Laboratories

Case Narrative

Job Number 941987

EPA METHOD 8015

Your samples were analyzed for gasoline and diesel by modified EPA method 8015.

Initial and continuing calibrations met EPA method 8015 acceptance criteria.

The method blanks analyzed with your samples met EPA method 8015 acceptance criteria for contamination.

No sample was designated in this batch to be used for matrix spike/spike duplicate analysis.

The results of the Blank Spike/Blank Spike Dup showed good recoveries indicating the laboratory was in control.

Core Laboratories

Case Narrative

Job Number 941987

Lead Analysis

The samples associated with this batch were analyzed for lead by EPA 6010 (technically equivalent to EPA 7420).

All method criteria was within tolerances. No sample was designated in this batch to be used for MS/MSD analysis.

Core Laboratories
QUALITY ASSURANCE REPORT
08/23/94

JOB NUMBER: 941987

CUSTOMER: Operational Technologies

ATTN: John Morris

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Gasoline				DATE/TIME ANALYZED: 08/19/94 00:00				QC BATCH NUMBER: 936953		
REPORTING LIMIT/DF: 100 UNITS: ug/L				METHOD REFERENCE : EPA 8015 (modified)				TECHNICIAN: RVJ		
BLANK	METHOD	MB081994	<100							
SPIKE	MATRIX	941979-8	910					0	1000	91
SPIKE	MATRIX DUP	941979-8	980					0	1000	98

PARAMETER: Lead (Pb) DATE/TIME ANALYZED: 08/19/94 13:54 QC BATCH NUMBER: 936963
REPORTING LIMIT/DF: 0.100 UNITS: mg/L METHOD REFERENCE : EPA 6010 TECHNICIAN: VB

BLANK	ICB	081994	<0.100							
BLANK	CCB	081994	<0.100							
BLANK	CCB	081994	<0.100							
BLANK	MB	081794MB	<0.100							
BLANK	CCB	081994	0.111							
STANDARD	ICV	M94267	1.06			1.00	106			
STANDARD	CCV	M94267	1.14			1.00	114			
STANDARD	CCV	M94267	0.964			1.00	96			
STANDARD	LCS	081794LCS	0.859			1.00	86			
STANDARD	CCV	M94267	0.914			1.00	91			
STANDARD	CCV	M94267	0.995			1.00	100			
SPIKE	MATRIX	941941-7	102					9.8	100	92
SPIKE	MATRIX	941941-7	105					9.8	100	95
SPIKE	MATRIX	941941-3	106					0	100	106
SPIKE	MATRIX	941941-4	96.8					0	100	97
SPIKE	MATRIX	941979-8	97.7					0.74	100	97
SPIKE	MATRIX	941979-8	99.0					0.74	100	98
DUPLICATE	MS/MSD	941941-3	106	96.8	9					
DUPLICATE	MS/MSD	941941-7	102	105	3					
DUPLICATE	MS/MSD	941979-8	977	990	1					

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QUALITY ASSURANCE REPORT
08/23/94

JOB NUMBER: 941987

CUSTOMER: Operational Technologies

ATTN: John Morris

Total Petroleum Hydrocarbons

DATE ANALYZED: 08/20/94 TIME ANALYZED: 00:00 METHOD: EPA 8015 (modified) QC NUMBER:936962

M A T R I X S P I K E S

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
iesel	MATRIX	941966-5	1	190	0	250	76	10	mg/L
	MATRIX DUP	941966-5	1	210	0	250	84	10	mg/L

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Core Laboratories
QUALITY ASSURANCE REPORT

EPA Method 624

JOB NUMBER: 941987

DATE ANALYZED: 8/19/94

B L A N K S

TEST DESCRIPTION	ANALYS.SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Acetone	METHOD	081994	1	ND	10	ug/L
Benzene	METHOD	081994	1	ND	5	ug/L
Bromodichloromethane	METHOD	081994	1	ND	5	ug/L
Bromoform	METHOD	081994	1	ND	5	ug/L
Bromomethane	METHOD	081994	1	ND	10	ug/L
2-Butanone	METHOD	081994	1	ND	10	ug/L
Carbon disulfide	METHOD	081994	1	ND	5	ug/L
Carbon tetrachloride	METHOD	081994	1	ND	5	ug/L
Chlorobenzene	METHOD	081994	1	ND	5	ug/L
Chlorodibromomethane	METHOD	081994	1	ND	5	ug/L
Chloroethane	METHOD	081994	1	ND	10	ug/L
2-Chloroethylvinyl ether	METHOD	081994	1	ND	10	ug/L
Chloroform	METHOD	081994	1	ND	5	ug/L
Chloromethane	METHOD	081994	1	ND	10	ug/L
1,1-Dichloroethane	METHOD	081994	1	ND	5	ug/L
1,2-Dichloroethene	METHOD	081994	1	ND	5	ug/L
1,1-Dichloroethene	METHOD	081994	1	ND	5	ug/L
1,2-Dichloroethene (total)	METHOD	081994	1	ND	5	ug/L
1,2-Dichloropropane	METHOD	081994	1	ND	5	ug/L
cis-1,3-Dichloropropene	METHOD	081994	1	ND	5	ug/L
trans-1,3-Dichloropropene	METHOD	081994	1	ND	5	ug/L
Ethylbenzene	METHOD	081994	1	ND	5	ug/L
2-Hexanone	METHOD	081994	1	ND	10	ug/L
Methylene chloride	METHOD	081994	1	ND	15	ug/L
4-Methyl-2-pentanone	METHOD	081994	1	ND	10	ug/L
Styrene	METHOD	081994	1	ND	5	ug/L
1,1,2,2-Tetrachloroethane	METHOD	081994	1	ND	5	ug/L
Tetrachloroethene	METHOD	081994	1	ND	5	ug/L
Toluene	METHOD	081994	1	ND	5	ug/L
1,1,1-Trichloroethane	METHOD	081994	1	ND	5	ug/L
1,1,2-Trichloroethane	METHOD	081994	1	ND	5	ug/L
Trichloroethene	METHOD	081994	1	ND	5	ug/L
Vinyl acetate	METHOD	081994	1	ND	5	ug/L
Vinyl chloride	METHOD	081994	1	ND	10	ug/L
Total xylenes	METHOD	081994	1	ND	5	ug/L
d4-1,2-Dichloroethane (SURROGATE)	METHOD	081994	1	102	76-114	% recovery
d8-Toluene (SURROGATE)	METHOD	081994	1	101	88-110	% recovery
4-Bromofluorobenzene (SURROGATE)	METHOD	081994	1	104	86-115	% recovery

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Core Laboratories
QUALITY ASSURANCE REPORT

EPA Method 624

JOB NUMBER: 941987

DATE ANALYZED: 8/19/94

MATRIX SPIKES

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	UNITS	PERCENT RECOVERY	RPD	QC LIMITS	
									%REC	RPD
Benzene	MATRIX	941979-9	58	0	50	ug/L	116	1.7	76-127	11
	MATRIX DUP	941979-9	57	0	50	ug/L	114			
Chlorobenzene	MATRIX	941979-9	46	0	50	ug/L	92	16.0	75-130	13
	MATRIX DUP	941979-9	54	0	50	ug/L	108			
1,1-Dichloroethene	MATRIX	941979-9	62	0	50	ug/L	124	4.7	61-145	14
	MATRIX DUP	941979-9	65	0	50	ug/L	130			
Trichloroethene	MATRIX	941979-9	57	0	50	ug/L	114	3.6	71-120	14
	MATRIX DUP	941979-9	55	0	50	ug/L	110			
Toluene	MATRIX	941979-9	56	0	50	ug/L	112	1.8	76-125	13
	MATRIX DUP	941979-9	55	0	50	ug/L	110			
1,4-Dichloroethane (SURROGATE)	MATRIX	941979-9	45	0	50	ug/L	90	N/A	76-114	N/A
	MATRIX DUP	941979-9	44	0	50	ug/L	88			
1,3,5-Trichlorobenzene (SURROGATE)	MATRIX	941979-9	46	0	50	ug/L	92	N/A	88-110	N/A
	MATRIX DUP	941979-9	48	0	50	ug/L	96			
1,2-Dibromobenzene (SURROGATE)	MATRIX	941979-9	48	0	50	ug/L	96	N/A	86-115	N/A
	MATRIX DUP	941979-9	49	0	50	ug/L	98			

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QUALITY ASSURANCE FOOTER

METHOD REFERENCES

- (1) EPA SW-846, Test Methods for Evaluating Solid Waste, Third Edition, November 1990, and July 1992 update
- (2) Standard Methods for the Examination of Water and Wastewater, 17th Edition, 1989
- (3) EPA 600/4-79-020, Methods of Chemical Analysis for Waters and Wastes, March 1983
- (4) Federal Register, Friday, October 26, 1984 (40 CFR Part 136)
- (5) American Society for Testing and Materials, Volumes 5.01, 5.02, 5.03, 1992
- (6) EPA 600/4-89-001, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Fresh Water Organisms
- (7) EPA 600/4-90-027, Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Fresh Water and Marine Organisms, Fourth Edition

COMMENTS

All methods of chemical analysis have a statistical uncertainty associated with the results. Unless otherwise indicated, the data in this report are within the limits of uncertainty as specified in the referenced method. Quality control acceptance criteria are based either on actual laboratory performance or on limits specified in the referenced method. The date and time of analysis indicated on the QA report may not reflect the actual time of analysis for QC samples. All data reported on an "as received" basis unless otherwise indicated. Data reported in the QA report may be lower than sample data due to dilution of samples into the calibration range of the analysis. Sample concentrations for solid samples are calculated on an as received (wet) basis. Unless otherwise indicated, volatiles by gas chromatography are reported from a single column.

FLAGS, FOOTNOTES, AND ABBREVIATIONS (as needed)

- | | |
|--|--|
| NA = Not analyzed | N.I. = Not Ignitable |
| N/A = Not applicable | S.I. = Sustains Ignition |
| ug/L = Micrograms per liter | I(NS) = Ignites, but does not Sustain Ignition |
| mg/L = Milligrams per liter | RPD = Relative Percent Difference |
| ND = Not detected at a value greater than the reporting limit | |
| NC = Not calculable due to values lower than the detection limit | |
| (a) = Surrogate recoveries were outside acceptable ranges due to matrix effects. | |
| (b) = Surrogate recoveries were not calculated due to dilution of the sample below the detectable range for the surrogate. | |
| (c) = Matrix spike recoveries were outside acceptable ranges due to matrix effects. | |
| (d) = Relative Percent Difference (RPD) for duplicate analysis outside acceptance limits due to actual differences in the sample matrix. | |
| (e) = The limit listed for flammability indicates the upper limit for the test. Samples are not tested at temperatures above 140 Fahrenheit since only samples which will sustain ignition at temperatures below 140 are considered flammable. | |
| (f) = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a diesel standard, however, the hydrocarbon pattern did not match a diesel pattern. | |
| (g) = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a gasoline standard, however, the hydrocarbon pattern did not match a gasoline pattern. | |
| (h) = High dilution due to matrix effects | |
| (i) = Samples with results below 500 mg/L are considered hazardous | |

QC SAMPLE IDENTIFICATIONS

- | | |
|---|-----------------------------------|
| MB = Method Blank | MS = Matrix Spike |
| RB = Reagent Blank | MSD = Matrix Spike Duplicate |
| ICS = Initial Calibration Blank | MD = Matrix Duplicate |
| CCB = Continuing Calibration Blank | RS = Reference Standard |
| SB = Storage Blank | BS = Blank Spike |
| CS = Calibration Standard | SS = Surrogate Spike |
| ICV = Initial Calibration Verification | LCS = Laboratory Control Standard |
| CCV = Continuing Calibration Verification | |

SUBCONTRACTED LABORATORY LOCATIONS

- | | | |
|-------------------------------|------------------------------|-----|
| Core Laboratories: | Aurora, Colorado(ELAP #1933) | *AU |
| | Casper, Wyoming | *CA |
| | Corpus Christi, Texas | *CC |
| | Houston, Texas | *HP |
| | Lake Charles, Louisiana | *LC |
| | Long Beach, California | *LB |
| Aquatic Testing Laboratories: | Ventura, California | *AT |

Core Laboratories
LABORATORY TESTS RESULTS
08/23/94

JOB NUMBER: 941987

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/11/94

TIME SAMPLED: 13:48

WORK DESCRIPTION: 05-003MW-A

LABORATORY I.D.: 941987-0002

DATE RECEIVED: 08/12/94

TIME RECEIVED: 09:20

REMARKS: 1 500mls-pls-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	COMPLETED	----	N/A	EPA 3020	08/16/94	ST
Volatile Organics by GC/MS		*1		EPA 624	08/19/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	104	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	97	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	108	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/20/94	RVJ

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LABORATORY TESTS RESULTS 08/23/94

JOB NUMBER: 941987

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
DATE SAMPLED: 08/11/94
TIME SAMPLED: 13:48
WORK DESCRIPTION: 05-003MW-A

LABORATORY I.D.: 941987-0002
DATE RECEIVED: 08/12/94
TIME RECEIVED: 09:20
REMARKS: 1 500mls-pls-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/L	EPA 8015 (modified)		
Gasoline	<100	100	ug/L	EPA 8015 (modified)	08/19/94	RVJ
Lead (Pb)	<1.0	1.0	mg/L	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/19/94	DC

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LABORATORY TESTS RESULTS 08/23/94

OB NUMBER: 941987

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/11/94

TIME SAMPLED: 14:34

WORK DESCRIPTION: 05-003MW-B

LABORATORY I.D.: 941987-0003

DATE RECEIVED: 08/12/94

TIME RECEIVED: 09:20

REMARKS: 1 500mls-pls-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	COMPLETED	-----	N/A	EPA 3020	08/16/94	ST
Volatile Organics by GC/MS		*1		EPA 624	08/19/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	100	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	100	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	119(a)	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/20/94	RVJ

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LABORATORY TESTS RESULTS 08/23/94

JOB NUMBER: 941987

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941987-0003

DATE SAMPLED: 08/11/94

DATE RECEIVED: 08/12/94

TIME SAMPLED: 14:34

TIME RECEIVED: 09:20

WORK DESCRIPTION: 05-003MW-B

REMARKS: 1 500mls-pls-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/L	EPA 8015 (modified)		
Gasoline	<100	100	ug/L	EPA 8015 (modified)	08/19/94	RVJ
Lead (Pb)	<1.0	1.0	mg/L	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/19/94	DC

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LABORATORY TESTS RESULTS 08/23/94

JOB NUMBER: 941987

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: 08/11/94

TIME SAMPLED: 18:00

WORK DESCRIPTION: 05-002MW-A

LABORATORY I.D.: 941987-0004

DATE RECEIVED: 08/12/94

TIME RECEIVED: 09:20

REMARKS: 1 500mls-pls-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	COMPLETED	----	N/A	EPA 3020	08/16/94	ST
Volatile Organics by GC/MS		*1		EPA 624	08/19/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	102	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	99	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	120(a)	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/20/94	RVJ

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LABORATORY TESTS RESULTS 08/23/94

JOB NUMBER: 941987

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941987-0004

DATE SAMPLED: 08/11/94

DATE RECEIVED: 08/12/94

TIME SAMPLED: 18:00

TIME RECEIVED: 09:20

WORK DESCRIPTION: 05-002MW-A

REMARKS: 1 500mls-pls-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/L	EPA 8015 (modified)		
Gasoline	1200	100	ug/L	EPA 8015 (modified)	08/19/94	RVJ
Lead (Pb)	<1.0	1.0	mg/L	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/19/94	DC

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LABORATORY TESTS RESULTS 08/23/94

JOB NUMBER: 941987

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941987-0005

DATE SAMPLED: 08/11/94

DATE RECEIVED: 08/12/94

TIME SAMPLED: 13:58

TIME RECEIVED: 09:20

WORK DESCRIPTION: 05-002MW-B

REMARKS: 1 500mls-pls-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	COMPLETED	-----	N/A	EPA 3020	08/16/94	ST
Volatile Organics by GC/MS		*1		EPA 624	08/19/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	104	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	102	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	115	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/20/94	RVJ

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LABORATORY TESTS RESULTS
08/23/94

JOB NUMBER: 941987

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941987-0005

DATE SAMPLED: 08/11/94

DATE RECEIVED: 08/12/94

TIME SAMPLED: 13:58

TIME RECEIVED: 09:20

WORK DESCRIPTION: 05-002MW-B

REMARKS: 1 500mls-pls-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/L	EPA 8015 (modified)		
Gasoline	1100	100	ug/L	EPA 8015 (modified)	08/19/94	RVJ
Lead (Pb)	<1.0	1.0	mg/L	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/19/94	DC

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LABORATORY TESTS RESULTS

08/23/94

LAB NUMBER: 941987

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941987-0006

DATE SAMPLED: / /

DATE RECEIVED: 08/12/94

TIME SAMPLED: :

TIME RECEIVED: 09:20

WORK DESCRIPTION: Trip Blank

REMARKS: 1 vial-CORE DI H2O

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 624	08/19/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	107	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	100	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	109	0	% Recovery	86-115% QC LIMITS		

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LABORATORY TESTS RESULTS

08/23/94

JOB NUMBER: 941987

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115
 DATE SAMPLED: 08/11/94
 TIME SAMPLED: 13:58
 WORK DESCRIPTION: 05-003MW-A-Duplicate

LABORATORY I.D.: 941987-0007
 DATE RECEIVED: 08/12/94
 TIME RECEIVED: 09:20
 REMARKS: 1 500mls-pls-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	COMPLETED	----	N/A	EPA 3020	08/16/94	ST
Volatile Organics by GC/MS		*1		EPA 624	08/19/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	104	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	100	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	115	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/20/94	RVJ

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LABORATORY TESTS RESULTS
08/23/94

JOB NUMBER: 941987

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941987-0007

DATE SAMPLED: 08/11/94

DATE RECEIVED: 08/12/94

TIME SAMPLED: 13:58

TIME RECEIVED: 09:20

WORK DESCRIPTION: 05-003MW-A-Duplicate

REMARKS: 1 500mls-pls-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/L	EPA 8015 (modified)		
Gasoline	<100	100	ug/L	EPA 8015 (modified)	08/19/94	RVJ
Lead (Pb)	<1.0	1.0	mg/L	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/19/94	DC

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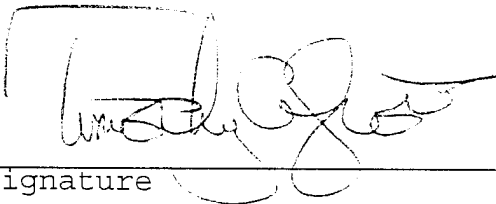
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CORE LABORATORIES
ANALYTICAL REPORT

Job Number: 941996
Prepared For:

Operational Technologies
John Morris
4100 NW Loop 410
San Antonio, TX 78289

Date: 08/23/94


Signature

8/24/94
Date:

Name: Timothy A. Scott

Core Laboratories
1250 Gene Autry Way
Anaheim, CA 92805

Title: Laboratory Manager

C.A.E.L.A.P. 1174
L.A.C.S.D. 10146

Core Laboratories

Case Narrative

Job Number 941996

EPA METHOD 8240

Your samples were analyzed for volatile organics by EPA method 8240.

Initial and continuing calibrations met EPA method 8240 acceptance criteria for all SPCC and CCC compounds.

One method blank was analyzed with your samples and met EPA method 8240 acceptance criteria for contamination and surrogate recovery.

Surrogate recoveries met EPA method 8240 acceptance criteria in all samples and spikes.

No sample was designated in this batch to be used for matrix spike and spike duplicate analysis.

The results of the Blank Spike/Blank Spike Dup showed good recoveries indicating the laboratory was in control.

Core Laboratories

Case Narrative

Job Number 941996

EPA METHOD 8015

Your samples were analyzed for gasoline and diesel by modified EPA method 8015.

Initial and continuing calibrations met EPA method 8015 acceptance criteria.

The method blanks analyzed with your samples met EPA method 8015 acceptance criteria for contamination.

No sample was designated in this batch to be used for matrix spike/spike duplicate analysis.

The results of the Blank Spike/Blank Spike Dup showed good recoveries indicating the laboratory was in control.

Core Laboratories

Case Narrative

Job Number 941996

Lead Analysis

The samples associated with this batch were analyzed for lead by EPA 6010 (technically equivalent to EPA 7420).

All method criteria was within tolerances. No sample was designated in this batch to be used for MS/MSD analysis.

Core Laboratories

LABORATORY TESTS RESULTS 08/23/94

OB NUMBER: 941996

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941996-0001

DATE SAMPLED: 08/12/94

DATE RECEIVED: 08/13/94

TIME SAMPLED: 12:24

TIME RECEIVED: 11:20

WORK DESCRIPTION: BG-001BH 1.5'

REMARKS: 2 Brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	----	N/A	EPA 3050	08/15/94	LS
Volatile Organics by GC/MS		*1		EPA 8240	08/19/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	8	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	111	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	108	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	96	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/20/94	RVJ

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LABORATORY TESTS RESULTS 08/23/94

JOB NUMBER: 941996

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941996-0001

DATE SAMPLED: 08/12/94

DATE RECEIVED: 08/13/94

TIME SAMPLED: 12:24

TIME RECEIVED: 11:20

WORK DESCRIPTION: BG-001BH 1.5'

REMARKS: 2 Brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<100	100	ug/kg	EPA 8015 (modified)	08/22/94	RVJ
Lead (Pb)	<10	10	mg/kg	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/19/94	DC
Raw data required (Metals)	N/A				N/A	N/A
Raw data required (Organics)	N/A				N/A	N/A

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LABORATORY TESTS RESULTS 08/23/94

JOB NUMBER: 941996

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

LABORATORY I.D.: 941996-0002

DATE SAMPLED: 08/12/94

DATE RECEIVED: 08/13/94

TIME SAMPLED: 12:28

TIME RECEIVED: 11:20

WORK DESCRIPTION: BG-001BH 9'

REMARKS: 2 Brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for ICP	COMPLETED	-----	N/A	EPA 3050	08/15/94	LS
Volatile Organics by GC/MS		*1		EPA 8240	08/19/94	CIS
Acetone	ND	10	ug/kg	EPA 8240		
Benzene	ND	5	ug/kg	EPA 8240		
Bromodichloromethane	ND	5	ug/kg	EPA 8240		
Bromoform	ND	5	ug/kg	EPA 8240		
Bromomethane	ND	10	ug/kg	EPA 8240		
2-Butanone	ND	10	ug/kg	EPA 8240		
Carbon disulfide	ND	5	ug/kg	EPA 8240		
Carbon tetrachloride	ND	5	ug/kg	EPA 8240		
Chlorobenzene	ND	5	ug/kg	EPA 8240		
Chlorodibromomethane	ND	5	ug/kg	EPA 8240		
Chloroethane	ND	10	ug/kg	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/kg	EPA 8240		
Chloroform	ND	5	ug/kg	EPA 8240		
Chloromethane	ND	10	ug/kg	EPA 8240		
1,1-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,2-Dichloroethane	ND	5	ug/kg	EPA 8240		
1,1-Dichloroethene	ND	5	ug/kg	EPA 8240		
Total 1,2-Dichloroethenes	ND	5	ug/kg	EPA 8240		
1,2-Dichloropropane	ND	5	ug/kg	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/kg	EPA 8240		
Ethylbenzene	ND	5	ug/kg	EPA 8240		
2-Hexanone	ND	10	ug/kg	EPA 8240		
Methylene Chloride	ND	5	ug/kg	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/kg	EPA 8240		
Styrene	ND	5	ug/kg	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/kg	EPA 8240		
Tetrachloroethene	ND	5	ug/kg	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/kg	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/kg	EPA 8240		
Trichloroethene	ND	5	ug/kg	EPA 8240		
Toluene	ND	5	ug/kg	EPA 8240		
Vinyl acetate	ND	10	ug/kg	EPA 8240		
Vinyl chloride	ND	10	ug/kg	EPA 8240		
Total Xylenes	ND	5	ug/kg	EPA 8240		
d4-Dichloroethane (SURROGATE)	104	0	% Recovery	70-121% QC LIMITS		
d8-Toluene (SURROGATE)	102	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	107	0	% Recovery	74-121% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	08/20/94	RVJ

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LABORATORY TESTS RESULTS 08/23/94

JOB NUMBER: 941996

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.....: Hayward ANG 1315-115
DATE SAMPLED.....: 08/12/94
TIME SAMPLED.....: 12:28
WORK DESCRIPTION...: BG-001BH 9'

LABORATORY I.D....: 941996-0002
DATE RECEIVED.....: 08/13/94
TIME RECEIVED.....: 11:20
REMARKS.....: 2 Brsslv-soil

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/kg	EPA 8015 (modified)		
Gasoline	<100	100	ug/kg	EPA 8015 (modified)	08/22/94	RVJ
Lead (Pb)	<10	10	mg/kg	EPA 6010	08/19/94	VB
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	08/19/94	DC
Raw data required (Metals)	N/A				N/A	N/A
Raw data required (Organics)	N/A				N/A	N/A

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LABORATORY TESTS RESULTS
08/23/94

JOB NUMBER: 941996

CUSTOMER: Operational Technologies

ATTN: John Morris

CLIENT I.D.: Hayward ANG 1315-115

DATE SAMPLED: / /

TIME SAMPLED:

WORK DESCRIPTION: Trip Blank

LABORATORY I.D.: 941996-0003

DATE RECEIVED: 08/13/94

TIME RECEIVED: 11:20

REMARKS: 1 vial-CORE DI H2O

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 8240	08/19/94	CIS
Acetone	ND	10	ug/L	EPA 8240		
Benzene	ND	5	ug/L	EPA 8240		
Bromodichloromethane	ND	5	ug/L	EPA 8240		
Bromoform	ND	5	ug/L	EPA 8240		
Bromomethane	ND	10	ug/L	EPA 8240		
2-Butanone	ND	10	ug/L	EPA 8240		
Carbon disulfide	ND	5	ug/L	EPA 8240		
Carbon tetrachloride	ND	5	ug/L	EPA 8240		
Chlorobenzene	ND	5	ug/L	EPA 8240		
Chlorodibromomethane	ND	5	ug/L	EPA 8240		
Chloroethane	ND	10	ug/L	EPA 8240		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 8240		
Chloroform	ND	5	ug/L	EPA 8240		
Chloromethane	ND	10	ug/L	EPA 8240		
1,1-Dichloroethane	ND	5	ug/L	EPA 8240		
1,2-Dichloroethane	ND	5	ug/L	EPA 8240		
1,1-Dichloroethene	ND	5	ug/L	EPA 8240		
trans-1,2-Dichloroethene	ND	5	ug/L	EPA 8240		
1,2-Dichloropropane	ND	5	ug/L	EPA 8240		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 8240		
Ethylbenzene	ND	5	ug/L	EPA 8240		
2-Hexanone	ND	10	ug/L	EPA 8240		
Methylene Chloride	ND	5	ug/L	EPA 8240		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 8240		
Styrene	ND	5	ug/L	EPA 8240		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 8240		
Tetrachloroethene	ND	5	ug/L	EPA 8240		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 8240		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 8240		
Trichloroethene	ND	5	ug/L	EPA 8240		
Toluene	ND	5	ug/L	EPA 8240		
Vinyl acetate	ND	10	ug/L	EPA 8240		
Vinyl chloride	ND	10	ug/L	EPA 8240		
Total Xylenes	ND	5	ug/L	EPA 8240		
d4-Dichloroethane (SURROGATE)	106	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	99	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	106	0	% Recovery	86-115% QC LIMITS		

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Core Laboratories

QUALITY ASSURANCE REPORT 08/23/94

JOB NUMBER: 941996 CUSTOMER: Operational Technologies ATTN: John Morris

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Lead (Pb)				DATE/TIME ANALYZED: 08/19/94 13:54				QC BATCH NUMBER: 936963		
REPORTING LIMIT/DF: 0.100 UNITS: mg/L				METHOD REFERENCE : EPA 6010				TECHNICIAN: VB		
BLANK	ICB	081994	<0.100							
BLANK	CCB	081994	<0.100							
BLANK	CCB	081994	<0.100							
BLANK	MB	081794MB	<0.100							
BLANK	CCB	081994	0.111							
STANDARD	ICV	M94267	1.06			1.00	106			
STANDARD	CCV	M94267	1.14			1.00	114			
STANDARD	CCV	M94267	0.964			1.00	96			
STANDARD	LCS	081794LCS	0.859			1.00	86			
STANDARD	CCV	M94267	0.914			1.00	91			
STANDARD	CCV	M94267	0.995			1.00	100			
SPIKE	MATRIX	941941-7	102					9.8	100	92
SPIKE	MATRIX	941941-7	105					9.8	100	95
SPIKE	MATRIX	941941-3	106					0	100	106
SPIKE	MATRIX	941941-4	96.8					0	100	97
SPIKE	MATRIX	941979-8	97.7					0.74	100	97
SPIKE	MATRIX	941979-8	99.0					0.74	100	98
DUPLICATE	MS/MSD	941941-3	106	96.8	9					
DUPLICATE	MS/MSD	941941-7	102	105	3					
DUPLICATE	MS/MSD	941979-8	977	990	1					

PARAMETER: Gasoline DATE/TIME ANALYZED: 08/22/94 00:00 QC BATCH NUMBER: 936970
REPORTING LIMIT/DF: 100 UNITS: ug/kg METHOD REFERENCE : EPA 8015 (modified) TECHNICIAN: RVJ

BLANK	METHOD	MB082294	<100					0		
SPIKE	MATRIX	941996-2	890					0	1000	89
SPIKE	MATRIX DUP	941996-2	900					0	1000	90

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Core Laboratories
QUALITY ASSURANCE REPORT

PA Method 8240

JOB NUMBER: 941996

DATE ANALYZED: 8/19/94

B L A N K S

TEST DESCRIPTION	ANALYS.SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Acetone	METHOD	081994	1	ND	10	ug/kg
Benzene	METHOD	081994	1	ND	5	ug/kg
Bromodichloromethane	METHOD	081994	1	ND	5	ug/kg
Bromoform	METHOD	081994	1	ND	5	ug/kg
Bromomethane	METHOD	081994	1	ND	10	ug/kg
2-Butanone	METHOD	081994	1	ND	10	ug/kg
Carbon disulfide	METHOD	081994	1	ND	5	ug/kg
Carbon tetrachloride	METHOD	081994	1	ND	5	ug/kg
Chlorobenzene	METHOD	081994	1	ND	5	ug/kg
Chlorodibromomethane	METHOD	081994	1	ND	5	ug/kg
Chloroethane	METHOD	081994	1	ND	10	ug/kg
Chloroethylvinyl ether	METHOD	081994	1	ND	10	ug/kg
Chloroform	METHOD	081994	1	ND	5	ug/kg
Chloromethane	METHOD	081994	1	ND	10	ug/kg
1,1-Dichloroethane	METHOD	081994	1	ND	5	ug/kg
1,2-Dichloroethene	METHOD	081994	1	ND	5	ug/kg
1,1-Dichloroethene	METHOD	081994	1	ND	5	ug/kg
1,2-Dichloroethene (total)	METHOD	081994	1	ND	5	ug/kg
1,2-Dichloropropane	METHOD	081994	1	ND	5	ug/kg
cis-1,3-Dichloropropene	METHOD	081994	1	ND	5	ug/kg
trans-1,3-Dichloropropene	METHOD	081994	1	ND	5	ug/kg
Ethylbenzene	METHOD	081994	1	ND	5	ug/kg
2-Hexanone	METHOD	081994	1	ND	10	ug/kg
Methylene chloride	METHOD	081994	1	ND	5	ug/kg
Methyl-2-pentanone	METHOD	081994	1	ND	10	ug/kg
Styrene	METHOD	081994	1	ND	5	ug/kg
1,1,2,2-Tetrachloroethane	METHOD	081994	1	ND	5	ug/kg
Tetrachloroethene	METHOD	081994	1	ND	5	ug/kg
Toluene	METHOD	081994	1	ND	5	ug/kg
1,1,1-Trichloroethane	METHOD	081994	1	ND	5	ug/kg
1,1,2-Trichloroethane	METHOD	081994	1	ND	5	ug/kg
Trichloroethene	METHOD	081994	1	ND	5	ug/kg
Vinyl acetate	METHOD	081994	1	ND	5	ug/kg
Vinyl chloride	METHOD	081994	1	ND	10	ug/kg
o-tal xylenes	METHOD	081994	1	ND	5	ug/kg
1,1,2-Dichloroethane (SURROGATE)	METHOD	081994	1	102	76-114	% recovery
o-8-Toluene (SURROGATE)	METHOD	081994	1	101	88-110	% recovery
p-Bromofluorobenzene (SURROGATE)	METHOD	081994	1	104	86-115	% recovery

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Core Laboratories
Q U A L I T Y A S S U R A N C E R E P O R T

EPA Method 8240

JOB NUMBER: 941996

DATE ANALYZED: 8/19/94

M A T R I X S P I K E S

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	UNITS	PERCENT RECOVERY	RPD	QC LIMITS	
									%REC	RPD
Benzene	MATRIX	941953-11	65	0	50	ug/kg	130	14.3	66-142	21
	MATRIX DUP	941953-11	75	0	50	ug/kg	150			
Chlorobenzene	MATRIX	941953-11	52	0	50	ug/kg	104	5.6	60-133	21
	MATRIX DUP	941953-11	55	0	50	ug/kg	110			
1,1-Dichloroethene	MATRIX	941953-11	66	0	50	ug/kg	132	8.7	59-172	22
	MATRIX DUP	941953-11	72	0	50	ug/kg	144			
Trichloroethene	MATRIX	941953-11	55	0	50	ug/kg	110	10.3	62-137	24
	MATRIX DUP	941953-11	61	0	50	ug/kg	122			
Toluene	MATRIX	941953-11	64	0	50	ug/kg	128	9.0	59-139	21
	MATRIX DUP	941953-11	70	0	50	ug/kg	140			
d4-Dichloroethane (SURROGATE)	MATRIX	941953-11	53	0	50	ug/kg	106	N/A	70-121	N/A
	MATRIX DUP	941953-11	56	0	50	ug/kg	112			
d8-Toluene (SURROGATE)	MATRIX	941953-11	52	0	50	ug/kg	104	N/A	84-138	N/A
	MATRIX DUP	941953-11	65	0	50	ug/kg	130			
4-Bromofluorobenzene (SURROGAT	MATRIX	941953-11	42	0	50	ug/kg	84	N/A	59-113	N/A
	MATRIX DUP	941953-11	42	0	50	ug/kg	84			

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Core Laboratories
QUALITY ASSURANCE REPORT

EPA Method 624

JOB NUMBER: 941996

DATE ANALYZED: 8/19/94

B L A N K S

TEST DESCRIPTION	ANALYS.SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Acetone	METHOD	081994	1	ND	10	ug/L
Benzene	METHOD	081994	1	ND	5	ug/L
Bromodichloromethane	METHOD	081994	1	ND	5	ug/L
Bromoform	METHOD	081994	1	ND	5	ug/L
Bromomethane	METHOD	081994	1	ND	10	ug/L
2-Butanone	METHOD	081994	1	ND	10	ug/L
Carbon disulfide	METHOD	081994	1	ND	5	ug/L
Carbon tetrachloride	METHOD	081994	1	ND	5	ug/L
Chlorobenzene	METHOD	081994	1	ND	5	ug/L
Chlorodibromomethane	METHOD	081994	1	ND	5	ug/L
Chloroethane	METHOD	081994	1	ND	10	ug/L
1-Chloroethylvinyl ether	METHOD	081994	1	ND	10	ug/L
Chloroform	METHOD	081994	1	ND	5	ug/L
Chloromethane	METHOD	081994	1	ND	10	ug/L
1,1-Dichloroethane	METHOD	081994	1	ND	5	ug/L
1,2-Dichloroethene	METHOD	081994	1	ND	5	ug/L
1,1-Dichloroethene	METHOD	081994	1	ND	5	ug/L
1,2-Dichloroethene (total)	METHOD	081994	1	ND	5	ug/L
1,2-Dichloropropane	METHOD	081994	1	ND	5	ug/L
cis-1,3-Dichloropropene	METHOD	081994	1	ND	5	ug/L
trans-1,3-Dichloropropene	METHOD	081994	1	ND	5	ug/L
Ethylbenzene	METHOD	081994	1	ND	5	ug/L
2-Hexanone	METHOD	081994	1	ND	10	ug/L
Methylene chloride	METHOD	081994	1	ND	15	ug/L
2-Methyl-2-pentanone	METHOD	081994	1	ND	10	ug/L
Styrene	METHOD	081994	1	ND	5	ug/L
1,1,2,2-Tetrachloroethane	METHOD	081994	1	ND	5	ug/L
Tetrachloroethene	METHOD	081994	1	ND	5	ug/L
Toluene	METHOD	081994	1	ND	5	ug/L
1,1,1-Trichloroethane	METHOD	081994	1	ND	5	ug/L
1,1,2-Trichloroethane	METHOD	081994	1	ND	5	ug/L
Trichloroethene	METHOD	081994	1	ND	5	ug/L
Vinyl acetate	METHOD	081994	1	ND	5	ug/L
Vinyl chloride	METHOD	081994	1	ND	10	ug/L
Total xylenes	METHOD	081994	1	ND	5	ug/L
1,4-1,2-Dichloroethane (SURROGATE)	METHOD	081994	1	102	76-114	% recovery
1,4-Toluene (SURROGATE)	METHOD	081994	1	101	88-110	% recovery
1,4-Bromofluorobenzene (SURROGATE)	METHOD	081994	1	104	86-115	% recovery

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Core Laboratories
QUALITY ASSURANCE REPORT

EPA Method 624

JOB NUMBER: 941996

DATE ANALYZED: 8/19/94

MATRIX SPIKES

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	UNITS	PERCENT RECOVERY	RPD	QC LIMITS	
									%REC	RPD
Benzene	MATRIX	941979-9	58	0	50	ug/L	116	1.7	76-127	11
	MATRIX DUP	941979-9	57	0	50	ug/L	114			
Chlorobenzene	MATRIX	941979-9	46	0	50	ug/L	92	16.0	75-130	13
	MATRIX DUP	941979-9	54	0	50	ug/L	108			
1,1-Dichloroethene	MATRIX	941979-9	62	0	50	ug/L	124	4.7	61-145	14
	MATRIX DUP	941979-9	65	0	50	ug/L	130			
Trichloroethene	MATRIX	941979-9	57	0	50	ug/L	114	3.6	71-120	14
	MATRIX DUP	941979-9	55	0	50	ug/L	110			
Toluene	MATRIX	941979-9	56	0	50	ug/L	112	1.8	76-125	13
	MATRIX DUP	941979-9	55	0	50	ug/L	110			
d4-Dichloroethane (SURROGATE)	MATRIX	941979-9	45	0	50	ug/L	90	N/A	76-114	N/A
	MATRIX DUP	941979-9	44	0	50	ug/L	88			
d8-Toluene (SURROGATE)	MATRIX	941979-9	46	0	50	ug/L	92	N/A	88-110	N/A
	MATRIX DUP	941979-9	48	0	50	ug/L	96			
4-Bromofluorobenzene (SURROGAT	MATRIX	941979-9	48	0	50	ug/L	96	N/A	86-115	N/A
	MATRIX DUP	941979-9	49	0	50	ug/L	98			

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QUALITY ASSURANCE FOOTER

METHOD REFERENCES

- (1) EPA SW-846, Test Methods for Evaluating Solid Waste, Third Edition, November 1990, and July 1992 update
- (2) Standard Methods for the Examination of Water and Wastewater, 17th Edition, 1989
- (3) EPA 600/4-79-020, Methods of Chemical Analysis for Waters and Wastes, March 1983
- (4) Federal Register, Friday, October 26, 1984 (40 CFR Part 136)
- (5) American Society for Testing and Materials, Volumes 5.01, 5.02, 5.03, 1992
- (6) EPA 600/4-89-001, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Fresh Water Organisms
- (7) EPA 600/4-90-027, Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Fresh Water and Marine Organisms, Fourth Edition

COMMENTS

All methods of chemical analysis have a statistical uncertainty associated with the results. Unless otherwise indicated, the data in this report are within the limits of uncertainty as specified in the referenced method. Quality control acceptance criteria are based either on actual laboratory performance or on limits specified in the referenced method. The date and time of analysis indicated on the QA report may not reflect the actual time of analysis for QC samples. All data reported on an "as received" basis unless otherwise indicated. Data reported in the QA report may be lower than sample data due to dilution of samples into the calibration range of the analysis. Sample concentrations for solid samples are calculated on an as received (wet) basis. Unless otherwise indicated, volatiles by gas chromatography are reported from a single column.

FLAGS, FOOTNOTES, AND ABBREVIATIONS (as needed)

- | | |
|--|--|
| NA = Not analyzed | N.I. = Not Ignitable |
| N/A = Not applicable | S.I. = Sustains Ignition |
| ug/L = Micrograms per liter | I(NS) = Ignites, but does not Sustain Ignition |
| mg/L = Milligrams per liter | RPD = Relative Percent Difference |
| ND = Not detected at a value greater than the reporting limit | |
| NC = Not calculable due to values lower than the detection limit | |
| (a) = Surrogate recoveries were outside acceptable ranges due to matrix effects. | |
| (b) = Surrogate recoveries were not calculated due to dilution of the sample below the detectable range for the surrogate. | |
| (c) = Matrix spike recoveries were outside acceptable ranges due to matrix effects. | |
| (d) = Relative Percent Difference (RPD) for duplicate analysis outside acceptance limits due to actual differences in the sample matrix. | |
| (e) = The limit listed for flammability indicates the upper limit for the test. Samples are not tested at temperatures above 140 Fahrenheit since only samples which will sustain ignition at temperatures below 140 are considered flammable. | |
| (f) = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a diesel standard, however, the hydrocarbon pattern did not match a diesel pattern. | |
| (g) = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a gasoline standard, however, the hydrocarbon pattern did not match a gasoline pattern. | |
| (h) = High dilution due to matrix effects | |
| (i) = Samples with results below 500 mg/L are considered hazardous | |

QC SAMPLE IDENTIFICATIONS

- | | |
|---|-----------------------------------|
| MB = Method Blank | MS = Matrix Spike |
| RB = Reagent Blank | MSD = Matrix Spike Duplicate |
| ICB = Initial Calibration Blank | MD = Matrix Duplicate |
| CCB = Continuing Calibration Blank | RS = Reference Standard |
| SB = Storage Blank | BS = Blank Spike |
| CS = Calibration Standard | SS = Surrogate Spike |
| ICV = Initial Calibration Verification | LCS = Laboratory Control Standard |
| CCV = Continuing Calibration Verification | |

SUBCONTRACTED LABORATORY LOCATIONS

- | | |
|-------------------------------|----------------------------------|
| Core Laboratories: | Aurora, Colorado(ELAP #1933) *AU |
| | Casper, Wyoming *CA |
| | Corpus Christi, Texas *CC |
| | Houston, Texas *HP |
| | Lake Charles, Louisiana *LC |
| | Long Beach, California *LB |
| Aquatic Testing Laboratories: | |
| | Ventura, California *AT |

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CORE LABORATORIES

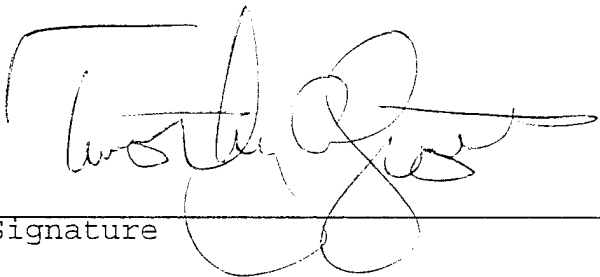
CORE LABORATORIES
ANALYTICAL REPORT

Job Number: 943126

Prepared For:

Operational Technologies
Jeff Blunt
4100 NW Loop 410, Suite 230
San Antonio, TX 78229

Date: 12/12/94


Signature

12/12/94
Date:

Name: Timothy A. Scott

Core Laboratories
1250 Gene Autry Way
Anaheim, CA 92805

Title: Laboratory Manager

C.A.E.L.A.P. 1174
L.A.C.S.D. 10146



ENVIRONMENTAL TESTING SERVICES

May 1, 1995

Mark Escobar
Operational Technologies
4100 NW Loop 410, Suite 230
San Antonio, TX 78229

RE: Core ID 943126

Dear Mr. Escobar:

Upon review of the above mentioned job number, we have found that lead was performed by EPA 6020 (not 6010). The differences in the methods account for the reporting limit variations. Revised report pages are attached.

Please feel free to call me if you have any additional questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Tim Scott", written over a horizontal line.

Tim Scott
Laboratory Manager



CORE LABORATORIES

LABORATORY TESTS RESULTS 12/12/94

JOB NUMBER: 943126

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315 - 115

DATE SAMPLED: 12/07/94

TIME SAMPLED: 07:16

WORK DESCRIPTION: BG-001 MW

LABORATORY I.D.: 943126-0001

DATE RECEIVED: 12/08/94

TIME RECEIVED: 09:40

REMARKS: 1 LP-/1 LA-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	COMPLETED	-----	N/A	EPA 3020	12/09/94	ST
Volatile Organics by GC/MS		*1		EPA 624	12/11/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	91	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	90	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	100	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	12/10/94	DC

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CORE LABORATORIES

LABORATORY TESTS RESULTS

05/01/95

JOB NUMBER: 943126

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315 - 115

DATE SAMPLED: 12/07/94

TIME SAMPLED: 07:16

WORK DESCRIPTION: BG-001 MW

LABORATORY I.D.: 943126-0001

DATE RECEIVED: 12/08/94

TIME RECEIVED: 09:40

REMARKS: 1 LP-/1 LA-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	50	ug/L	EPA 8015 (modified)		
Gasoline	190	100	ug/L	EPA 8015 (modified)	12/09/94	DC
Lead (Pb)	<0.050	0.050	mg/L	EPA 6020	12/10/94	EAW
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	12/09/94	DC

REVISED REPORT
PAGE:2

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CORE LABORATORIES

LABORATORY TESTS RESULTS 12/12/94

JOB NUMBER: 943126

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315 - 115

DATE SAMPLED: 12/07/94

TIME SAMPLED: 07:50

WORK DESCRIPTION: 04-001 MW

LABORATORY I.D.: 943126-0002

DATE RECEIVED: 12/08/94

TIME RECEIVED: 09:40

REMARKS: 1 LP-/1 LA-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	COMPLETED	-----	N/A	EPA 3020	12/09/94	ST
Volatile Organics by GC/MS		*1		EPA 624	12/11/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	91	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	94	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	104	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	12/10/94	DC

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CORE LABORATORIES

LABORATORY TESTS RESULTS

05/01/95

JOB NUMBER: 943126

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315 - 115
DATE SAMPLED: 12/07/94
TIME SAMPLED: 07:50
WORK DESCRIPTION: 04-001 MW

LABORATORY I.D.: 943126-0002
DATE RECEIVED: 12/08/94
TIME RECEIVED: 09:40
REMARKS: 1 LP-/1 LA-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	50	ug/L	EPA 8015 (modified)		
Gasoline	<100	100	ug/L	EPA 8015 (modified)	12/09/94	DC
Lead (Pb)	<0.050	0.050	mg/L	EPA 6020	12/10/94	EAW
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	12/09/94	DC

REVISED REPORT

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CORE LABORATORIES

LABORATORY TESTS RESULTS 12/12/94

JOB NUMBER: 943126

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315 - 115

DATE SAMPLED: 12/07/94

TIME SAMPLED: 08:22

WORK DESCRIPTION: 04-002 MW

LABORATORY I.D.: 943126-0003

DATE RECEIVED: 12/08/94

TIME RECEIVED: 09:40

REMARKS: 1 LP-/1 LA-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	COMPLETED	----	N/A	EPA 3020	12/09/94	ST
Volatile Organics by GC/MS		*5		EPA 624	12/11/94	CIS
Acetone	ND	50	ug/L	EPA 624		
Benzene	ND	25	ug/L	EPA 624		
Bromodichloromethane	ND	25	ug/L	EPA 624		
Bromoform	ND	25	ug/L	EPA 624		
Bromomethane	ND	50	ug/L	EPA 624		
2-Butanone	ND	50	ug/L	EPA 624		
Carbon disulfide	ND	25	ug/L	EPA 624		
Carbon tetrachloride	ND	25	ug/L	EPA 624		
Chlorobenzene	ND	25	ug/L	EPA 624		
Chloroethane	ND	50	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	50	ug/L	EPA 624		
Chloroform	ND	25	ug/L	EPA 624		
Chloromethane	ND	50	ug/L	EPA 624		
Dibromochloromethane	ND	25	ug/L	EPA 624		
1,1-Dichloroethane	ND	25	ug/L	EPA 624		
1,2-Dichloroethane	ND	25	ug/L	EPA 624		
1,1-Dichloroethene	ND	25	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	25	ug/L	EPA 624		
1,2-Dichloropropane	ND	25	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	25	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	25	ug/L	EPA 624		
Ethylbenzene	ND	25	ug/L	EPA 624		
2-Hexanone	ND	50	ug/L	EPA 624		
Methylene Chloride	ND	25	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	50	ug/L	EPA 624		
Styrene	ND	25	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	25	ug/L	EPA 624		
Tetrachloroethene	ND	25	ug/L	EPA 624		
Toluene	ND	25	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	25	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	25	ug/L	EPA 624		
Trichloroethene	ND	25	ug/L	EPA 624		
Vinyl acetate	ND	50	ug/L	EPA 624		
Vinyl chloride	ND	50	ug/L	EPA 624		
Total Xylenes	ND	25	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	88	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	88	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	105	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	12/10/94	DC

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CORE LABORATORIES

LABORATORY TESTS RESULTS 05/01/95

JOB NUMBER: 943126

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315 - 115

DATE SAMPLED: 12/07/94

TIME SAMPLED: 08:22

WORK DESCRIPTION: 04-002 MW

LABORATORY I.D.: 943126-0003

DATE RECEIVED: 12/08/94

TIME RECEIVED: 09:40

REMARKS: 1 LP-/1 LA-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	840	50	ug/L	EPA 8015 (modified)		
Gasoline	1400	500	ug/L	EPA 8015 (modified)	12/09/94	DC
Lead (Pb)	<0.050	0.050	mg/L	EPA 6020	12/10/94	EAW
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	12/09/94	DC

REVISED REPORT

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CORE LABORATORIES

LABORATORY TESTS RESULTS 12/12/94

JOB NUMBER: 943126

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315 - 115

DATE SAMPLED: 12/07/94

TIME SAMPLED: 08:35

WORK DESCRIPTION: 04-002 MW-Dup

LABORATORY I.D.: 943126-0004

DATE RECEIVED: 12/08/94

TIME RECEIVED: 09:40

REMARKS: 1 LP-/1 LA-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	COMPLETED	----	N/A	EPA 3020	12/09/94	ST
Volatile Organics by GC/MS		*5		EPA 624	12/11/94	CIS
Acetone	ND	50	ug/L	EPA 624		
Benzene	ND	25	ug/L	EPA 624		
Bromodichloromethane	ND	25	ug/L	EPA 624		
Bromoform	ND	25	ug/L	EPA 624		
Bromomethane	ND	50	ug/L	EPA 624		
2-Butanone	ND	50	ug/L	EPA 624		
Carbon disulfide	ND	25	ug/L	EPA 624		
Carbon tetrachloride	ND	25	ug/L	EPA 624		
Chlorobenzene	ND	25	ug/L	EPA 624		
Chloroethane	ND	50	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	50	ug/L	EPA 624		
Chloroform	ND	25	ug/L	EPA 624		
Chloromethane	ND	50	ug/L	EPA 624		
Dibromochloromethane	ND	25	ug/L	EPA 624		
1,1-Dichloroethane	ND	25	ug/L	EPA 624		
1,2-Dichloroethane	ND	25	ug/L	EPA 624		
1,1-Dichloroethene	ND	25	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	25	ug/L	EPA 624		
1,2-Dichloropropane	ND	25	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	25	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	25	ug/L	EPA 624		
Ethylbenzene	ND	25	ug/L	EPA 624		
2-Hexanone	ND	50	ug/L	EPA 624		
Methylene Chloride	ND	25	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	50	ug/L	EPA 624		
Styrene	ND	25	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	25	ug/L	EPA 624		
Tetrachloroethene	ND	25	ug/L	EPA 624		
Toluene	ND	25	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	25	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	25	ug/L	EPA 624		
Trichloroethene	ND	25	ug/L	EPA 624		
Vinyl acetate	ND	50	ug/L	EPA 624		
Vinyl chloride	ND	50	ug/L	EPA 624		
Total Xylenes	ND	25	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	94	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	89	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	98	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	12/10/94	DC

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CORE LABORATORIES

LABORATORY TESTS RESULTS

05/01/95

JOB NUMBER: 943126

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315 - 115
DATE SAMPLED: 12/07/94
TIME SAMPLED: 08:35
WORK DESCRIPTION: 04-002 MW-Dup

LABORATORY I.D.: 943126-0004
DATE RECEIVED: 12/08/94
TIME RECEIVED: 09:40
REMARKS: 1 LP-/1 LA-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	920	50	ug/L	EPA 8015 (modified)		
Gasoline	1200	100	ug/L	EPA 8015 (modified)	12/09/94	DC
Lead (Pb)	<0.050	0.050	mg/L	EPA 6020	12/10/94	EAW
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	12/09/94	DC
REVISED REPORT						

1250 Gene Autry Way
Anaheim, CA 92805
(714) 937-1094



CORE LABORATORIES

LABORATORY TESTS RESULTS

12/12/94

JOB NUMBER: 943126

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315 - 115

DATE SAMPLED: 12/07/94

TIME SAMPLED: 08:57

WORK DESCRIPTION: Field Blank

LABORATORY I.D.: 943126-0005

DATE RECEIVED: 12/08/94

TIME RECEIVED: 09:40

REMARKS: 1 LP-/1 LA-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 624	12/11/94	CIS
Acetone	23	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	18	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	90	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	96	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	106	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	12/10/94	DC
Diesel	ND	50	ug/L	EPA 8015 (modified)		

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CORE LABORATORIES

LABORATORY TESTS RESULTS 05/01/95

JOB NUMBER: 943126

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315 - 115
DATE SAMPLED: 12/07/94
TIME SAMPLED: 08:57
WORK DESCRIPTION: Field Blank

LABORATORY I.D.: 943126-0005
DATE RECEIVED: 12/08/94
TIME RECEIVED: 09:40
REMARKS: 1 LP-/1 LA-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Gasoline	<100	100	ug/L	EPA 8015 (modified)	12/09/94	DC
Lead (Pb)	<0.005	0.005	mg/L	EPA 6020	12/10/94	EAW
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	12/09/94	DC

REVISED REPORT

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CORE LABORATORIES

LABORATORY TESTS RESULTS 12/12/94

JOB NUMBER: 943126

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315 - 115

DATE SAMPLED: 12/07/94

TIME SAMPLED: 09:03

WORK DESCRIPTION: EQ Blank

LABORATORY I.D.: 943126-0006

DATE RECEIVED: 12/08/94

TIME RECEIVED: 09:40

REMARKS: 1 LP-/1 LA-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 624	12/11/94	CIS
Acetone	26	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	18	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	98	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	94	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	104	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	12/10/94	DC
Diesel	ND	50	ug/L	EPA 8015 (modified)		

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CORE LABORATORIES

LABORATORY TESTS RESULTS

05/01/95

JOB NUMBER: 943126 CUSTOMER: Operational Technologies ATTN: Jeff Blunt

CLIENT I.D.: 1315 - 115
DATE SAMPLED: 12/07/94
TIME SAMPLED: 09:03
WORK DESCRIPTION: EQ Blank

LABORATORY I.D.: 943126-0006
DATE RECEIVED: 12/08/94
TIME RECEIVED: 09:40
REMARKS: 1 LP-/1 LA-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Gasoline	<100	100	ug/L	EPA 8015 (modified)	12/09/94	DC
Lead (Pb)	<0.005	0.005	mg/L	EPA 6020	12/10/94	EAW
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	12/09/94	DC
REVISED REPORT						

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CORE LABORATORIES

LABORATORY TESTS RESULTS
12/12/94

LAB NUMBER: 943126

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315 - 115

DATE SAMPLED: 12/07/94

TIME SAMPLED: 10:18

WORK DESCRIPTION: 05-001 MW

LABORATORY I.D.: 943126-0009

DATE RECEIVED: 12/08/94

TIME RECEIVED: 09:40

REMARKS: 1 LP-/1 LA-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	COMPLETED	----	N/A	EPA 3020	12/09/94	ST
Volatile Organics by GC/MS		*1		EPA 624	12/11/94	CJS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	87	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	92	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	107	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	12/10/94	DC

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CORE LABORATORIES

LABORATORY TESTS RESULTS

05/01/95

JOB NUMBER: 943126

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315 - 115
DATE SAMPLED: 12/07/94
TIME SAMPLED: 10:18
WORK DESCRIPTION: 05-001 MW

LABORATORY I.D.: 943126-0009
DATE RECEIVED: 12/08/94
TIME RECEIVED: 09:40
REMARKS: 1 LP-/1 LA-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	50	ug/L	EPA 8015 (modified)		
Gasoline	<100	100	ug/L	EPA 8015 (modified)	12/09/94	DC
Lead (Pb)	<0.050	0.050	mg/L	EPA 6020	12/10/94	EAW
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	12/09/94	DC
REVISED REPORT						

1250 Gene Autry Way
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CORELAB**CORE LABORATORIES**LABORATORY TESTS RESULTS
12/12/94

NUMBER: 943126

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315 - 115

DATE SAMPLED: 12/07/94

TIME SAMPLED: 10:50

WORK DESCRIPTION: 05-002 MW

LABORATORY I.D.: 943126-0010

DATE RECEIVED: 12/08/94

TIME RECEIVED: 09:40

REMARKS: 1 LP-/1 LA-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	COMPLETED	-----	N/A	EPA 3020	12/09/94	ST
Volatile Organics by GC/MS		*5		EPA 624	12/11/94	CIS
Acetone	ND	50	ug/L	EPA 624		
Benzene	ND	25	ug/L	EPA 624		
Bromodichloromethane	ND	25	ug/L	EPA 624		
Bromoform	ND	25	ug/L	EPA 624		
Bromomethane	ND	50	ug/L	EPA 624		
2-Butanone	ND	50	ug/L	EPA 624		
Carbon disulfide	ND	25	ug/L	EPA 624		
Carbon tetrachloride	ND	25	ug/L	EPA 624		
Chlorobenzene	ND	25	ug/L	EPA 624		
Chloroethane	ND	50	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	50	ug/L	EPA 624		
Chloroform	ND	25	ug/L	EPA 624		
Chloromethane	ND	50	ug/L	EPA 624		
Dibromochloromethane	ND	25	ug/L	EPA 624		
1,1-Dichloroethane	ND	25	ug/L	EPA 624		
1,2-Dichloroethane	ND	25	ug/L	EPA 624		
1,1-Dichloroethene	ND	25	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	25	ug/L	EPA 624		
1,2-Dichloropropane	ND	25	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	25	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	25	ug/L	EPA 624		
Ethylbenzene	ND	25	ug/L	EPA 624		
2-Hexanone	ND	50	ug/L	EPA 624		
Methylene Chloride	ND	25	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	50	ug/L	EPA 624		
Styrene	ND	25	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	25	ug/L	EPA 624		
Tetrachloroethene	ND	25	ug/L	EPA 624		
Toluene	ND	25	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	25	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	25	ug/L	EPA 624		
Trichloroethene	ND	25	ug/L	EPA 624		
Vinyl acetate	ND	50	ug/L	EPA 624		
Vinyl chloride	ND	50	ug/L	EPA 624		
Total Xylenes	ND	25	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	92	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	98	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	104	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	12/10/94	DC

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CORE LABORATORIES

LABORATORY TESTS RESULTS 05/01/95

JOB NUMBER: 943126 CUSTOMER: Operational Technologies ATTN: Jeff Blunt

CLIENT I.D.: 1315 - 115
DATE SAMPLED: 12/07/94
TIME SAMPLED: 10:50
WORK DESCRIPTION: 05-002 MW

LABORATORY I.D.: 943126-0010
DATE RECEIVED: 12/08/94
TIME RECEIVED: 09:40
REMARKS: 1 LP-/1 LA-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	980	50	ug/L	EPA 8015 (modified)		
Gasoline	770	500	ug/L	EPA 8015 (modified)	12/09/94	DC
Lead (Pb)	<0.050	0.050	mg/L	EPA 6020	12/10/94	EAW
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	12/09/94	DC
REVISED REPORT						

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CORE LABORATORIES

LABORATORY TESTS RESULTS 12/12/94

JOB NUMBER: 943126

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315 - 115

DATE SAMPLED: 12/07/94

TIME SAMPLED: 09:20

WORK DESCRIPTION: 05-003 MW

LABORATORY I.D.: 943126-0008

DATE RECEIVED: 12/08/94

TIME RECEIVED: 09:40

REMARKS: 1 LP-/1 LA-/3 voas-water

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Acid Digestion for GFAA and ICP/MS	COMPLETED	-----	N/A	EPA 3020	12/09/94	ST
Volatile Organics by GC/MS		*1		EPA 624	12/11/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	95	0	% Recovery	76-114% QC LIMITS		
dB-Toluene (SURROGATE)	94	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	114	0	% Recovery	86-115% QC LIMITS		
Total Petroleum Hydrocarbons		*1		EPA 8015 (modified)	12/10/94	DC

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CORE LABORATORIES

LABORATORY TESTS RESULTS

05/01/95

JOB NUMBER: 943126

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315 - 115
DATE SAMPLED: 12/07/94
TIME SAMPLED: 09:20
WORK DESCRIPTION: 05-003 MW

LABORATORY I.D.: 943126-0008
DATE RECEIVED: 12/08/94
TIME RECEIVED: 09:40
REMARKS: 1 LP-/1 LA-/3 voas-water

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	50	ug/L	EPA 8015 (modified)		
Gasoline	<100	100	ug/L	EPA 8015 (modified)	12/09/94	DC
Lead (Pb)	<0.050	0.050	mg/L	EPA 6020	12/10/94	EAW
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	12/09/94	DC
REVISED REPORT						

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CORE LABORATORIES

LABORATORY TESTS RESULTS 12/12/94

JOB NUMBER: 943126

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315 - 115

DATE SAMPLED: 12/07/94

TIME SAMPLED: :

WORK DESCRIPTION: Trip Blank

LABORATORY I.D.: 943126-0007

DATE RECEIVED: 12/08/94

TIME RECEIVED: 09:40

REMARKS: 3 voas-CORE DI H2O

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 624	12/11/94	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	86	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	96	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	107	0	% Recovery	86-115% QC LIMITS		
soline	<100	100	ug/L	EPA 8015 (modified)	12/09/94	DC

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CORE LABORATORIES

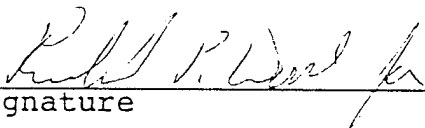
CORE LABORATORIES ANALYTICAL REPORT

Job Number: 953596

Prepared For:

Operational Technologies
Jeff Blunt
4100 NW Loop 410, Suite 230
San Antonio, TX 78229

Date: 01/09/96


Signature

1/9/96
Date:

Name: Timothy A. Scott

Core Laboratories
1250 Gene Autry Way
Anaheim, CA 92805

Title: Laboratory Manager

REVISED REPORT



CORE LABORATORIES

Case Narrative

Job Number 953596

EPA Method 8015

These samples were analyzed for gasoline and diesel by modified EPA method 8015.

Initial and continuing calibrations met acceptance criteria.

The blanks analyzed with these samples met acceptance criteria for contamination and surrogate recovery.

Surrogate recoveries met acceptance criteria in all samples.



CORE LABORATORIES

CASE NARRATIVE

METALS ANALYSIS

JOB NUMBER 953596

Your samples were analyzed for lead by EPA Method 6020.

Initial and continuing calibrations met EPA Method acceptance criteria.

All matrix spike and matrix spike duplicate criteria were met for lead.



CORE LABORATORIES

LABORATORY TESTS RESULTS

01/09/96

JOB NUMBER: 953596

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315-189

DATE SAMPLED: 12/05/95

TIME SAMPLED: 11:05

WORK DESCRIPTION: Site 5 MW-001 05-001MW

LABORATORY I.D.: 953596-0007

DATE RECEIVED: 12/08/95

TIME RECEIVED: 10:03

REMARKS: H2O VOA/Plastic

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Metals Digestion-Aqueous	COMPLETED		N/A	EPA 3010A	12/12/95	S A
Volatile Organics by GC/MS		*1		EPA 624	12/11/95	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,2-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,3-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,4-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	104	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	106	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	94	0	% Recovery	86-115% QC LIMITS		

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/09/96

JOB NUMBER: 953596

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315-189

DATE SAMPLED: 12/05/95

TIME SAMPLED: 11:05

WORK DESCRIPTION: Site 5 MW-001 05-001MW

LABORATORY I.D.: 953596-0007

DATE RECEIVED: 12/08/95

TIME RECEIVED: 10:03

REMARKS: H2O VOA/Plastic

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
TEPH - Diesel (Liquids)		*1		EPA 8015 (modified)	12/14/95	DC
Diesel	ND	10	mg/L	EPA 8015 (modified)		
TVPH - Gasoline	<50	50	ug/L	EPA 8015 (modified)	12/13/95	RVJ
Metals		*1		EPA 6020	12/12/95	EAW
Lead (Pb)	ND	0.005	mg/L	EPA 6020		
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	12/13/95	DC

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/09/96

JOB NUMBER: 953596

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315-189

DATE SAMPLED: 12/05/95

TIME SAMPLED: 09:10

WORK DESCRIPTION: SITE 5 MW-002 05-002MW

LABORATORY I.D.: 953596-0004

DATE RECEIVED: 12/08/95

TIME RECEIVED: 10:03

REMARKS: H2O VOA/Plastic

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Metals Digestion-Aqueous	COMPLETED		N/A	EPA 3010A	12/12/95	S A
Volatile Organics by GC/MS		*1		EPA 624	12/11/95	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,2-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,3-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,4-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	105	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	106	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	96	0	% Recovery	86-115% QC LIMITS		

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LABORATORY TESTS RESULTS

01/09/96

JOB NUMBER: 953596

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315-189

DATE SAMPLED: 12/05/95

TIME SAMPLED: 09:10

WORK DESCRIPTION: SITE 5 MW-002 05-002MW

LABORATORY I.D.: 953596-0004

DATE RECEIVED: 12/08/95

TIME RECEIVED: 10:03

REMARKS: H2O VOA/Plastic

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
TEPH - Diesel (Liquids)		*1		EPA 8015 (modified)	12/14/95	DC
Diesel	ND	10	mg/L	EPA 8015 (modified)		
TVPH - Gasoline	1300	50	ug/L	EPA 8015 (modified)	12/13/95	RVJ
Metals		*1		EPA 6020	12/12/95	EAW
Lead (Pb)	ND	0.005	mg/L	EPA 6020		
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	12/13/95	DC

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LABORATORY TESTS RESULTS

01/09/96

JOB NUMBER: 953596

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315-189

DATE SAMPLED: 12/05/95

TIME SAMPLED: 09:10

WORK DESCRIPTION: Site 5 MW-002 DUPO5-002MW

LABORATORY I.D.: 953596-0005

DATE RECEIVED: 12/08/95

TIME RECEIVED: 10:03

REMARKS: H2O VOA/Plastic

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Metals Digestion-Aqueous	COMPLETED		N/A	EPA 3010A	12/12/95	S A
Volatile Organics by GC/MS		*1		EPA 624	12/11/95	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,2-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,3-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,4-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	110	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	105	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	92	0	% Recovery	86-115% QC LIMITS		

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/09/96

JOB NUMBER: 953596

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315-189

DATE SAMPLED: 12/05/95

TIME SAMPLED: 09:10

WORK DESCRIPTION: Site 5 MW-002 DUP05-002MW

LABORATORY I.D.: 953596-0005

DATE RECEIVED: 12/08/95

TIME RECEIVED: 10:03

REMARKS: H2O VOA/Plastic

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
TEPH - Diesel (Liquids)		*1		EPA 8015 (modified)	12/14/95	DC
Diesel	ND	10	mg/L	EPA 8015 (modified)		
TVPH - Gasoline	300	50	ug/L	EPA 8015 (modified)	12/13/95	RVJ
Metals		*1		EPA 6020	12/12/95	EAJ
Lead (Pb)	ND	0.005	mg/L	EPA 6020		
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	12/13/95	DC

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/09/96

JOB NUMBER: 953596

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315-189

DATE SAMPLED: 12/05/95

TIME SAMPLED: 10:20

WORK DESCRIPTION: Site 5 MW-003 05-003MW

LABORATORY I.D.: 953596-0006

DATE RECEIVED: 12/08/95

TIME RECEIVED: 10:03

REMARKS: H2O VOA/Plastic

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Metals Digestion-Aqueous	COMPLETED		N/A	EPA 3010A	12/12/95	S A
Volatile Organics by GC/MS		*1		EPA 624	12/11/95	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,2-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,3-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,4-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	104	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	106	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	94	0	% Recovery	86-115% QC LIMITS		

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/09/96

JOB NUMBER: 953596

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315-189

DATE SAMPLED: 12/05/95

TIME SAMPLED: 10:20

WORK DESCRIPTION: Site 5 MW-003 05-003MW

LABORATORY I.D.: 953596-0006

DATE RECEIVED: 12/08/95

TIME RECEIVED: 10:03

REMARKS: H2O VOA/Plastic

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
TEPH - Diesel (Liquids)		*1		EPA 8015 (modified)	12/14/95	DC
Diesel	ND	10	mg/L	EPA 8015 (modified)		
TVPH - Gasoline	<50	50	ug/L	EPA 8015 (modified)	12/13/95	RVJ
Metals		*1		EPA 6020	12/12/95	EAW
Lead (Pb)	ND	0.005	mg/L	EPA 6020		
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	12/13/95	DC

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/09/96

JOB NUMBER: 953596

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315-189

DATE SAMPLED: 12/05/95

TIME SAMPLED: 00:00

WORK DESCRIPTION: Trip Blank 1207TB

LABORATORY I.D.: 953596-0001

DATE RECEIVED: 12/08/95

TIME RECEIVED: 10:03

REMARKS: H2O VOA

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 624	12/11/95	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,2-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,3-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,4-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	98	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	104	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	96	0	% Recovery	86-115% QC LIMITS		
EPH - Diesel (Liquids)		*1		EPA 8015 (modified)	12/14/95	DC

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Anaheim, CA 92805
(714) 937-1094



CORE LABORATORIES

LABORATORY TESTS RESULTS 01/09/96

JOB NUMBER: 953596 CUSTOMER: Operational Technologies ATTN: Jeff Blunt

CLIENT I.D.: 1315-189
DATE SAMPLED: 12/05/95
TIME SAMPLED: 00:00
WORK DESCRIPTION: Trip Blank 1207TB

LABORATORY I.D.: 953596-0001
DATE RECEIVED: 12/08/95
TIME RECEIVED: 10:03
REMARKS: H2O VOA

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/L	EPA 8015 (modified)		
TVPH - Gasoline	<50	50	ug/L	EPA 8015 (modified)	12/12/95	RVJ
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	12/13/95	DC

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Anaheim, CA 92805
(714) 937-1094



CORE LABORATORIES

LABORATORY TESTS RESULTS

01/09/96

JOB NUMBER: 953596

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315-189

DATE SAMPLED: 12/05/95

TIME SAMPLED: 08:55

WORK DESCRIPTION: Equipt Blank 1207EB

LABORATORY I.D.: 953596-0003

DATE RECEIVED: 12/08/95

TIME RECEIVED: 10:03

REMARKS: H2O VOA

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 624	12/11/95	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,2-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,3-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,4-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	101	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	105	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	94	0	% Recovery	86-115% QC LIMITS		
TEPH - Diesel (Liquids)		*1		EPA 8015 (modified)	12/14/95	DC

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/09/96

JOB NUMBER: 953596

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315-189

DATE SAMPLED: 12/05/95

TIME SAMPLED: 08:55

WORK DESCRIPTION: Equipt Blank 1207EB

LABORATORY I.D.: 953596-0003

DATE RECEIVED: 12/08/95

TIME RECEIVED: 10:03

REMARKS: H2O VOA

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/L	EPA 8015 (modified)		
TVPH - Gasoline	<50	50	ug/L	EPA 8015 (modified)	12/13/95	RVJ
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	12/13/95	DC

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/09/96

JOB NUMBER: 953596

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315-189

LABORATORY I.D.: 953596-0002

DATE SAMPLED: 12/05/95

DATE RECEIVED: 12/08/95

TIME SAMPLED: 09:00

TIME RECEIVED: 10:03

WORK DESCRIPTION: Field Blank 1207FB

REMARKS: H2O VOA

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Volatile Organics by GC/MS		*1		EPA 624	12/11/95	CIS
Acetone	ND	10	ug/L	EPA 624		
Benzene	ND	5	ug/L	EPA 624		
Bromodichloromethane	ND	5	ug/L	EPA 624		
Bromoform	ND	5	ug/L	EPA 624		
Bromomethane	ND	10	ug/L	EPA 624		
2-Butanone	ND	10	ug/L	EPA 624		
Carbon disulfide	ND	5	ug/L	EPA 624		
Carbon tetrachloride	ND	5	ug/L	EPA 624		
Chlorobenzene	ND	5	ug/L	EPA 624		
Chloroethane	ND	10	ug/L	EPA 624		
2-Chloroethylvinyl ether	ND	10	ug/L	EPA 624		
Chloroform	ND	5	ug/L	EPA 624		
Chloromethane	ND	10	ug/L	EPA 624		
Dibromochloromethane	ND	5	ug/L	EPA 624		
1,2-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,3-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,4-Dichlorobenzene	ND	5	ug/L	EPA 624		
1,1-Dichloroethane	ND	5	ug/L	EPA 624		
1,2-Dichloroethane	ND	5	ug/L	EPA 624		
1,1-Dichloroethene	ND	5	ug/L	EPA 624		
Total 1,2-Dichloroethenes	ND	5	ug/L	EPA 624		
1,2-Dichloropropane	ND	5	ug/L	EPA 624		
cis-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
trans-1,3-Dichloropropene	ND	5	ug/L	EPA 624		
Ethylbenzene	ND	5	ug/L	EPA 624		
2-Hexanone	ND	10	ug/L	EPA 624		
Methylene Chloride	ND	5	ug/L	EPA 624		
4-Methyl-2-pentanone	ND	10	ug/L	EPA 624		
Styrene	ND	5	ug/L	EPA 624		
1,1,2,2-Tetrachloroethane	ND	5	ug/L	EPA 624		
Tetrachloroethene	ND	5	ug/L	EPA 624		
Toluene	ND	5	ug/L	EPA 624		
1,1,1-Trichloroethane	ND	5	ug/L	EPA 624		
1,1,2-Trichloroethane	ND	5	ug/L	EPA 624		
Trichloroethene	ND	5	ug/L	EPA 624		
Vinyl acetate	ND	10	ug/L	EPA 624		
Vinyl chloride	ND	10	ug/L	EPA 624		
Total Xylenes	ND	5	ug/L	EPA 624		
d4-1,2-Dichloroethane (SURROGATE)	106	0	% Recovery	76-114% QC LIMITS		
d8-Toluene (SURROGATE)	105	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene (SURROGATE)	90	0	% Recovery	86-115% QC LIMITS		
TEPH - Diesel (Liquids)		*1		EPA 8015 (modified)	12/14/95	DC

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/09/96

JOB NUMBER: 953596

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

CLIENT I.D.: 1315-189

DATE SAMPLED: 12/05/95

TIME SAMPLED: 09:00

WORK DESCRIPTION: Field Blank 1207FB

LABORATORY I.D.: 953596-0002

DATE RECEIVED: 12/08/95

TIME RECEIVED: 10:03

REMARKS: H2O VOA

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diesel	ND	10	mg/L	EPA 8015 (modified)		
TVPH - Gasoline	<50	50	ug/L	EPA 8015 (modified)	12/12/95	RVJ
Total Hydrocarbons Extraction	COMPLETED	-----	N/A	Cal. DHS Method	12/13/95	DC

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JOB NUMBER: 953596

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

PARAMETER: TVPH - Gasoline	DATE/TIME ANALYZED: 12/13/95 00:00	QC BATCH NUMBER: 948147
REPORTING LIMIT/DF: 50 UNITS: ug/L	METHOD REFERENCE: EPA 8015 (modified)	TECHNICIAN: RVJ

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01/09/96

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

DATE ANALYZED: 12/14/95 TIME ANALYZED: 00:00 METHOD: EPA 8015 (modified) QC NUMBER:948172

BLANKS

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CORE LABORATORIES

QUALITY ASSURANCE REPORT

01/09/96

JOB NUMBER: 953596

CUSTOMER: Operational Technologies

ATTN: Jeff Blunt

Total Petroleum Hydrocarbons

DATE ANALYZED: 12/14/95 TIME ANALYZED: 00:00 METHOD: EPA 8015 (modified) QC NUMBER:948172

M A T R I X S P I K E S

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Diesel	MATRIX	953590-2	1	1210	0	1000	121	10	mg/L
	MATRIX DUP	953590-2	1	1150	0	1000	115	10	mg/L

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CORE LABORATORIES

QUALITY ASSURANCE REPORT

EPA Method 624

JOB NUMBER: 953596

DATE ANALYZED: 12/11/95

B L A N K S

TEST DESCRIPTION	ANALYS. SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Acetone	METHOD	121195	1	ND	10	ug/L
Benzene	METHOD	121195	1	ND	5	ug/L
Bromodichloromethane	METHOD	121195	1	ND	5	ug/L
Bromoform	METHOD	121195	1	ND	5	ug/L
Bromomethane	METHOD	121195	1	ND	10	ug/L
2-Butanone	METHOD	121195	1	ND	10	ug/L
Carbon disulfide	METHOD	121195	1	ND	5	ug/L
Carbon tetrachloride	METHOD	121195	1	ND	5	ug/L
Chlorobenzene	METHOD	121195	1	ND	5	ug/L
Chlorodibromomethane	METHOD	121195	1	ND	5	ug/L
Chloroethane	METHOD	121195	1	ND	10	ug/L
2-Chloroethylvinyl ether	METHOD	121195	1	ND	10	ug/L
Chloroform	METHOD	121195	1	ND	5	ug/L
Chloromethane	METHOD	121195	1	ND	10	ug/L
1,1-Dichloroethane	METHOD	121195	1	ND	5	ug/L
1,2-Dichloroethene	METHOD	121195	1	ND	5	ug/L
1,1-Dichloroethene	METHOD	121195	1	ND	5	ug/L
1,2-Dichloroethene (total)	METHOD	121195	1	ND	5	ug/L
1,2-Dichloropropane	METHOD	121195	1	ND	5	ug/L
cis-1,3-Dichloropropene	METHOD	121195	1	ND	5	ug/L
trans-1,3-Dichloropropene	METHOD	121195	1	ND	5	ug/L
Ethylbenzene	METHOD	121195	1	ND	5	ug/L
2-Hexanone	METHOD	121195	1	ND	10	ug/L
Methylene chloride	METHOD	121195	1	ND	15	ug/L
4-Methyl-2-pentanone	METHOD	121195	1	ND	10	ug/L
Styrene	METHOD	121195	1	ND	5	ug/L
1,1,2,2-Tetrachloroethane	METHOD	121195	1	ND	5	ug/L
Tetrachloroethene	METHOD	121195	1	ND	5	ug/L
Toluene	METHOD	121195	1	ND	5	ug/L
1,1,1-Trichloroethane	METHOD	121195	1	ND	5	ug/L
1,1,2-Trichloroethane	METHOD	121195	1	ND	5	ug/L
Trichloroethene	METHOD	121195	1	ND	5	ug/L
Vinyl acetate	METHOD	121195	1	ND	5	ug/L
Vinyl chloride	METHOD	121195	1	ND	10	ug/L
Total xylenes	METHOD	121195	1	ND	5	ug/L
d4-1,2-Dichloroethane (SURROGATE)	METHOD	121195	1	98	76-114	% recovery
d8-Toluene (SURROGATE)	METHOD	121195	1	104	88-110	% recovery
4-Bromofluorobenzene (SURROGATE)	METHOD	121195	1	96	86-115	% recovery

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CORE LABORATORIES

QUALITY ASSURANCE REPORT

EPA Method 624

JOB NUMBER: 953596

DATE ANALYZED: 12/11/95

MATRIX SPIKES

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	UNITS	PERCENT RECOVERY	RPD	QC LIMITS	
									%REC	RPD
Benzene	MATRIX	953561-10	45.8	0	50.0	ug/L	92	3.6	76-127	11
	MATRIX DUP	953561-10	44.2	0	50.0	ug/L	88			
Chlorobenzene	MATRIX	953561-10	46.4	0	50.0	ug/L	93	8.1	75-130	13
	MATRIX DUP	953561-10	42.8	0	50.0	ug/L	86			
1,1-Dichloroethene	MATRIX	953561-10	47.4	0	50.0	ug/L	95	8.8	61-145	14
	MATRIX DUP	953561-10	43.4	0	50.0	ug/L	87			
Trichloroethene	MATRIX	953561-10	48.5	0	50.0	ug/L	97	10.4	71-120	14
	MATRIX DUP	953561-10	43.7	0	50.0	ug/L	87			
Toluene	MATRIX	953561-10	47.6	0	50.0	ug/L	95	7.2	76-125	13
	MATRIX DUP	953561-10	44.3	0	50.0	ug/L	89			
d4-Dichloroethane (SURROGATE)	MATRIX	953561-10	59.6	0	50.0	ug/L	119	N/A	76-114	N/A
	MATRIX DUP	953561-10	57.2	0	50.0	ug/L	114			
d8-Toluene (SURROGATE)	MATRIX	953561-10	50	0	50.0	ug/L	100	N/A	88-110	N/A
	MATRIX DUP	953561-10	48.1	0	50.0	ug/L	96			
p-Bromofluorobenzene (SURROGATE)	MATRIX	953561-10	48.2	0	50.0	ug/L	96	N/A	86-115	N/A
	MATRIX DUP	953561-10	46.4	0	50.0	ug/L	93			

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CORE LABORATORIES

QUALITY ASSURANCE FOOTER

METHOD REFERENCES

- (1) EPA SW-846, Test Methods for Evaluating Solid Waste, Third Edition, November 1990, and July 1992 update
- (2) Standard Methods for the Examination of Water and Wastewater, 17th Edition, 1989
- (3) EPA 600/4-79-020, Methods of Chemical Analysis for Waters and Wastes, March 1983
- (4) Federal Register, Friday, October 26, 1984 (40 CFR Part 136)
- (5) American Society for Testing and Materials, Volumes 5.01, 5.02, 5.03, 1992
- (6) EPA 600/4-89-001, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Fresh Water Organisms
- (7) EPA 600/4-90-027, Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Fresh Water and Marine Organisms, Fourth Edition

COMMENTS

All methods of chemical analysis have a statistical uncertainty associated with the results. Unless otherwise indicated, the data in this report are within the limits of uncertainty as specified in the referenced method. Quality control acceptance criteria are based either on actual laboratory performance or on limits specified in the referenced method. The date and time of analysis indicated on the QA report may not reflect the actual time of analysis for QC samples. All data reported on an "as received" basis unless otherwise indicated. Data reported in the QA report may be lower than sample data due to dilution of samples into the calibration range of the analysis. Sample concentrations for solid samples are calculated on an as received (wet) basis. Unless otherwise indicated, volatiles by gas chromatography are reported from a single column. Volatiles analyses on low level soils are conducted at room temperature.

FLAGS, FOOTNOTES, AND ABBREVIATIONS (as needed)

- | | |
|--|--|
| NA = Not analyzed | N.I. = Not Ignitable |
| N/A = Not applicable | S.I. = Sustains Ignition |
| ug/L = Micrograms per liter | I(NS) = Ignites, but does not Sustain Ignition |
| mg/L = Milligrams per liter | RPD = Relative Percent Difference |
| ND = Not detected at a value greater than the reporting limit | |
| NC = Not calculable due to values lower than the detection limit | |
| (a) = Surrogate recoveries were outside acceptable ranges due to matrix effects. | |
| (b) = Surrogate recoveries were not calculated due to dilution of the sample below the detectable range for the surrogate. | |
| (c) = Matrix spike recoveries were outside acceptable ranges due to matrix effects. | |
| (d) = Relative Percent Difference (RPD) for duplicate analysis outside acceptance limits due to actual differences in the sample matrix. | |
| (e) = The limit listed for flammability indicates the upper limit for the test. Samples are not tested at temperatures above 140 Fahrenheit since only samples which will sustain ignition at temperatures below 140 are considered flammable. | |
| (f) = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a diesel standard, however, the hydrocarbon pattern did not match a diesel pattern. | |
| (g) = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a gasoline standard, however, the hydrocarbon pattern did not match a gasoline pattern. | |
| (h) = High dilution due to matrix effects | |
| (i) = Samples with results below 500 mg/L are considered hazardous | |

QC SAMPLE IDENTIFICATIONS

- | | |
|---|-----------------------------------|
| MB = Method Blank | SB = Storage Blank |
| RB = Reagent Blank | MS = Matrix Spike |
| ICB = Initial Calibration Blank | MSD = Matrix Spike Duplicate |
| CCB = Continuing Calibration Blank | MD = Matrix Duplicate |
| CS = Calibration Standard | BS = Blank Spike |
| ICB = Initial Calibration Verification | SS = Surrogate Spike |
| CCV = Continuing Calibration Verification | LCS = Laboratory Control Standard |
| | RS = Reference Standard |

SUBCONTRACTED LABORATORY LOCATIONS

- Core Laboratories: Aurora, Colorado(ELAP #1933) *AU
Casper, Wyoming *CA
Corpus Christi, Texas *CC
Houston, Texas *HP
Lake Charles, Louisiana *LC
Long Beach, California *LB

- Aquatic Testing Laboratories:
Ventura, California *AT



CORE LABORATORIES

ICP/MS BLANK DATA

Date
Analyzed: 12-12-95

Analyte		Cal. Blank (ug/l)	Cont. Blank (ug/l)	Det. Limits (ug/l)
Antimony	(Sb)	ND	ND	5.0
Arsenic	(As)	ND	ND	5.0
Barium	(Ba)	ND	ND	5.0
Beryllium	(Be)	ND	ND	5.0
Cadmium	(Cd)	ND	ND	5.0
Chromium	(Cr)	ND	ND	5.0
Cobalt	(Co)	ND	ND	5.0
Copper	(Cu)	ND	ND	5.0
Lead	(Pb)	ND	ND	5.0
Molybdenum	(Mo)	ND	ND	5.0
Nickel	(Ni)	ND	ND	5.0
Silver	(Ag)	ND	ND	5.0
Thallium	(Tl)	ND	ND	5.0
Vanadium	(V)	ND	ND	5.0
Zinc	(Zn)	ND	ND	10



CORE LABORATORIES

ICP/MS REFERENCE STANDARD

Date Analyzed: 12-12-95 Sample Number: M94388

Element		True Conc. (ug/l)	Actual Conc. (ug/l)	% Rec
Antimony	(Sb)	1000	1044	104
Arsenic	(As)	1000	949	94.9
Barium	(Ba)	1000	1003	100
Beryllium	(Be)	1000	961	96.1
Cadmium	(Cd)	1000	981	98.1
Chromium	(Cr)	1000	941	94
Cobalt	(Co)	1000	962	96.2
Copper	(Cu)	1000	996	99.6
Lead	(Pb)	1000	1038	103
Molybdenum	(Mo)	1000	1079	106
Nickel	(Ni)	1000	970	97
Silver	(Ag)	500	423	84.6
Thallium	(Tl)	1000	1018	101
Vanadium	(V)	1000	956	95.6
Zinc	(Zn)	1000	1014	101



CORE LABORATORIES

ICP/MS Matrix Spike Analysis

Date Analyzed: 12-12-95 Sample Number: 953627-1

Element		Spike Added (ug/L)	Sample Conc. (ug/L)	MS Conc. (ug/L)	MS %Rec	MSD Conc. (ug/L)	MSD %Rec	RPD
Antimony	(SB)	500	ND	511	102	545	109	7
Arsenic	(AS)	500	ND	457	91	491	98	7
Barium	(BA)	500	10	507	99	507	99	0
Beryllium	(BE)	500	ND	451	90	457	91	1
Cadmium	(CD)	500	ND	417	83	419	84	0
Chromium	(CR)	500	ND	472	94	494	99	5
Cobalt	(CO)	500	ND	464	93	490	98	6
Copper	(CU)	500	78	543	93	563	97	4
Lead	(PB)	500	64	593	106	590	105	1
Molybdenum	(MO)	500	45	604	112	622	115	3
Nickel	(NI)	500	ND	468	94	488	98	4
Silver	(AG)	500	ND	143	29	112	22	22 **
Thallium	(TL)	500	ND	506	101	511	102	1
Vanadium	(V)	500	ND	469	94	478	96	2
Zinc	(ZN)	500	985	901	-17	942	-9	5 *

* MATRIX INTERFERENCE

** LOW DUE TO POSSIBLE PRECIPITATION OF AG



CORE LABORATORIES

QUALITY ASSURANCE FOOTER

METHOD REFERENCES

- (1) EPA SW-846, Test Methods for Evaluating Solid Waste, Third Edition, November 1990, and July 1992 update
- (2) Standard Methods for the Examination of Water and Wastewater, 17th Edition, 1989
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- (7) EPA 600/4-90-027, Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Fresh Water and Marine Organisms, Fourth Edition

COMMENTS

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FLAGS, FOOTNOTES, AND ABBREVIATIONS (as needed)

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| NA = Not analyzed | N.I. = Not Ignitable |
| N/A = Not applicable | S.I. = Sustains Ignition |
| ug/L = Micrograms per liter | I(NS) = Ignites, but does not Sustain Ignition |
| mg/L = Milligrams per liter | RPD = Relative Percent Difference |
| ND = Not detected at a value greater than the reporting limit | |
| NC = Not calculable due to values lower than the detection limit | |
| (a) = Surrogate recoveries were outside acceptable ranges due to matrix effects. | |
| (b) = Surrogate recoveries were not calculated due to dilution of the sample below the detectable range for the surrogate. | |
| (c) = Matrix spike recoveries were outside acceptable ranges due to matrix effects. | |
| (d) = Relative Percent Difference (RPD) for duplicate analysis outside acceptance limits due to actual differences in the sample matrix. | |
| (e) = The limit listed for flammability indicates the upper limit for the test. Samples are not tested at temperatures above 140 Fahrenheit since only samples which will sustain ignition at temperatures below 140 are considered flammable. | |
| (f) = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a diesel standard, however, the hydrocarbon pattern did not match a diesel pattern. | |
| (g) = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a gasoline standard, however, the hydrocarbon pattern did not match a gasoline pattern. | |
| (h) = High dilution due to matrix effects | |
| (i) = Samples with results below 500 mg/L are considered hazardous | |

QC SAMPLE IDENTIFICATIONS

- | | |
|---|-----------------------------------|
| MB = Method Blank | SB = Storage Blank |
| RB = Reagent Blank | MS = Matrix Spike |
| ICB = Initial Calibration Blank | MSD = Matrix Spike Duplicate |
| CCB = Continuing Calibration Blank | MD = Matrix Duplicate |
| CS = Calibration Standard | BS = Blank Spike |
| ICB = Initial Calibration Verification | SS = Surrogate Spike |
| CCV = Continuing Calibration Verification | LCS = Laboratory Control Standard |
| | RS = Reference Standard |

SUBCONTRACTED LABORATORY LOCATIONS

- | | | |
|-------------------------------|------------------------------|-----|
| Core Laboratories: | Aurora, Colorado(ELAP #1933) | *AU |
| | Casper, Wyoming | *CA |
| | Corpus Christi, Texas | *CC |
| | Houston, Texas | *HP |
| | Lake Charles, Louisiana | *LC |
| | Long Beach, California | *LB |
| Aquatic Testing Laboratories: | Ventura, California | *AT |

APPENDIX H

CHAINS OF CUSTODY



CORE LABORATORIES

CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION				PROJECT INFORMATION				ANALYSIS / METHOD		NUMBER OF CONTAINERS		REMARKS / PRECAUTIONS	
COMPANY: OFTECH				PROJECT NAME/NUMBER: HAYWARD ANALYSIS				TOTAL LEAD / SW 7420		LAB JOB NO. 941849			
SEND REPORT TO: JOHN MORRIS				BILLING INFORMATION 1315-115				TPH / SCIS Mod					
ADDRESS: 4100 NW LOOP 410 #230				BILL TO: CPTERH				VOA / SW 8240					
ADDRESS: SAN ANTONIO, TX 78239				ADDRESS: 4100 NW LOOP 410 #230									
PHONE: 210 731-0000				PHONE: 210 731-0000									
FAX: 210 731-0008				FAX: 210 731-0008									
PO NO.: 210 731-0008				PO NO.: 210 731-0008									
SAMPLE NO.		SAMPLE ID		SAMPLE DATE		SAMPLE TIME		SAMPLE MATRIX		CONTAINER TYPE		PRES.	
1	04-002BH 1'			7/28/94		1005		SCIL		BRASS SLEEVE		✓	
2	04-002BH 6'					1010						✓	
3	04-002BH 11'					1020						✓	
4	04-001BH 1'					1202						✓	
5	04-001BH 11'					1215						✓	
6	04-001BH 21'					1235						✓	
7	04-003BH 1'					1312						✓	
8	04-003BH 6'					1315						✓	
9	04-003BH 11'					1318						✓	
10	04-004BH 1.5'					1445						✓	
SAMPLER: B. Hughes, R. Torres, M. Escobar				SHIPMENT METHOD: FGN EX									
REQUIRED TURNAROUND: 24 HOURS				SHIPMENT METHOD: FGN EX									
1. RELINQUISHED BY: [Signature]				2. RELINQUISHED BY: [Signature]									
DATE: 7/28/94				DATE: 7/28/94									
TIME: 1800				TIME: 1800									
PRINTED NAME/COMPANY: OFTECH				PRINTED NAME/COMPANY: OFTECH									
1. RECEIVED BY: [Signature]				2. RECEIVED BY: [Signature]									
DATE: 7/28/94				DATE: 7/28/94									
TIME: 1800				TIME: 1800									
PRINTED NAME/COMPANY: OFTECH				PRINTED NAME/COMPANY: OFTECH									

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

- ☒ Anaheim, California
1250 E. Gene Autry Way
Anaheim, California 92805
(714) 937-1094
(800) 404-2673
- ☐ Long Beach, California
3700 Cherry Avenue
Long Beach, California 90807
(310) 595-8401
(800) 814-3433
- ☐ Casper, Wyoming
420 West 1st Street
Casper, Wyoming 82601
(307) 235-5741
(800) 666-0306
- ☐ Houston, Texas
8210 Mossy Road
Houston, Texas 77075
(713) 943-9776
(800) 734-2673
- ☐ Corpus Christi, Texas
1733 North Padre Island Drive
Corpus Christi, Texas 78408
(512) 289-2673
(800) 548-9228
- ☐ Lake Charles, Louisiana
3645 Beglis Parkway
Lake Charles, Louisiana 70663
(318) 583-4926
(800) 259-4926

ORIGINAL



CHAIN OF CUSTODY RECORD

702

CUSTOMER INFORMATION				PROJECT INFORMATION				ANALYSIS / METHOD REQUEST				REMARKS / PRECAUTIONS			
COMPANY: OPTECH				PROJECT NAME/NUMBER: HAYWARD ANGS 1315-115				TOTAL LEAD/SLW 7420							
SEND REPORT TO: JOHN MORRIS				BILLING INFORMATION				TOTAL LEAD/SLW 7420							
ADDRESS: 4100 NW LOOP 410 #230				BILL TO: OPTECH				TOTAL LEAD/SLW 7420							
SAN ANTONIO TEXAS 78229				ADDRESS: 4100 NW LOOP 410 #230				TOTAL LEAD/SLW 7420							
PHONE: 210 731-0000				PHONE: 210 731-0000				TOTAL LEAD/SLW 7420							
FAX: 210 731-0008				FAX: 210 731-0008				TOTAL LEAD/SLW 7420							
SAMPLE NO.				SAMPLE ID				SAMPLE DATE				SAMPLE TIME			
11				04-004BH 1.5 Dup				7/28/94				1450			
12				04-004BH 6'				1530				1540			
13				04-004BH 7' ms/msd				1610				1613			
14				04-004BH 11.5'				1434				1536			
15				04-004BH 11.5 Dup				1434				1536			
16				04-004BH 11.5 Dup				1434				1536			
17				04-004BH 11.5 Dup				1434				1536			
18				04-004BH 11.5 Dup				1434				1536			
19				04-004BH 11.5 Dup				1434				1536			
20				04-004BH 11.5 Dup				1434				1536			
21				04-004BH 11.5 Dup				1434				1536			
22				04-004BH 11.5 Dup				1434				1536			
23				04-004BH 11.5 Dup				1434				1536			
24				04-004BH 11.5 Dup				1434				1536			
25				04-004BH 11.5 Dup				1434				1536			
26				04-004BH 11.5 Dup				1434				1536			
27				04-004BH 11.5 Dup				1434				1536			
28				04-004BH 11.5 Dup				1434				1536			
29				04-004BH 11.5 Dup				1434				1536			
30				04-004BH 11.5 Dup				1434				1536			
31				04-004BH 11.5 Dup				1434				1536			
32				04-004BH 11.5 Dup				1434				1536			
33				04-004BH 11.5 Dup				1434				1536			
34				04-004BH 11.5 Dup				1434				1536			
35				04-004BH 11.5 Dup				1434				1536			
36				04-004BH 11.5 Dup				1434				1536			
37				04-004BH 11.5 Dup				1434				1536			
38				04-004BH 11.5 Dup				1434				1536			
39				04-004BH 11.5 Dup				1434				1536			
40				04-004BH 11.5 Dup				1434				1536			
41				04-004BH 11.5 Dup				1434				1536			
42				04-004BH 11.5 Dup				1434				1536			
43				04-004BH 11.5 Dup				1434				1536			
44				04-004BH 11.5 Dup				1434				1536			
45				04-004BH 11.5 Dup				1434				1536			
46				04-004BH 11.5 Dup				1434				1536			
47				04-004BH 11.5 Dup				1434				1536			
48				04-004BH 11.5 Dup				1434				1536			
49				04-004BH 11.5 Dup				1434				1536			
50				04-004BH 11.5 Dup				1434				1536			
51				04-004BH 11.5 Dup				1434				1536			
52				04-004BH 11.5 Dup				1434				1536			
53				04-004BH 11.5 Dup				1434				1536			
54				04-004BH 11.5 Dup				1434				1536			
55				04-004BH 11.5 Dup				1434				1536			
56				04-004BH 11.5 Dup				1434				1536			
57				04-004BH 11.5 Dup				1434				1536			
58				04-004BH 11.5 Dup				1434				1536			
59				04-004BH 11.5 Dup				1434				1536			
60				04-004BH 11.5 Dup				1434				1536			
61				04-004BH 11.5 Dup				1434				1536			
62				04-004BH 11.5 Dup				1434				1536			
63				04-004BH 11.5 Dup				1434				1536			
64															

* BUSH TILBANDMAY REQUIRE SURCHARGE

☐ Anaheim, California
 250 E. Gene Autry Way
 Anaheim, California 92805
 (714) 937-1094
 (800) 404-2673

☐ **Denver (Aurora), Colorado**
10703 E. Bethany Drive
Aurora, Colorado 80014
(303) 751-1780
(800) 972-2673

☐ Casper, Wyoming
420 West 1st Street
Casper, Wyoming 82601
(307) 235-5741
(800) 666-0306

Houston, Texas
8210 Mosely Road
Houston, Texas 77075
(713) 943-9776
(800) 724-2672

Corpus Christi, Texas
1733 North Padre Island Drive
Corpus Christi, Texas 78408
(512) 289-2673

☐ Lake Charles, Louisiana
3645 Beglis Parkway
Sulphur, Louisiana 70663
(318) 583-4926



CORE LABORATORIES

CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION				PROJECT INFORMATION				ANALYSIS / METHOD REQUEST				REMARKS / PRECAUTIONS			
COMPANY: OPTTECH				PROJECT NAME/NUMBER: Hayward AUG 1315-115				LAB JOB NO. 941979							
SEND REPORT TO: John Morris				BILLING INFORMATION											
ADDRESS: 4100 NW LOOP 40 #230				BILL TO: (SAME AS LEFT)											
ADDRESS: SAN ANTONIO TX 78239				ADDRESS: (SAME AS LEFT)											
PHONE: 210 731-0000				PHONE: (SAME AS LEFT)											
FAX: 210 731-0008				FAX: (SAME AS LEFT)											
PO NO.:				SHIPMENT METHOD: FED-EX											
AIRBILL NO.:															
SAMPLE NO.	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	NUMBER OF CONTAINERS								
1	04-001 MW A	8/10/94	0907	WATER	VOA, 500ml plastic	Y	4								
2	04-002 MW B	8/10/94	1001	WATER	↓	Y	4								
3	BG-001 MW A	8/10/94	12:30	↓	↓	↓	4								
4	BG-001 MW A DUP	8/10/94	12:37	↓	↓	↓	4								
5	04-002 MW A	8/10/94	17:38	↓	↓	↓	4								
6	BG-001 MW B	8/10/94	13:40	↓	↓	↓	4								
7	FB-2	8/10/94	1600	↓	↓	↓	4								
8	EB-2	8/10/94	1552	↓	↓	↓	4								
9	TRIP BLANK	—	—	↓	UDA VIAL	↓	1								

1. RELINQUISHED BY:		2. RELINQUISHED BY:		3. RELINQUISHED BY:	
SIGNATURE	DATE	SIGNATURE	DATE	SIGNATURE	DATE
<i>[Signature]</i>	8/10/94				
PRINTED NAME/COMPANY:		PRINTED NAME/COMPANY:		PRINTED NAME/COMPANY:	
1. RECEIVED BY:		2. RECEIVED BY:		3. RECEIVED BY:	
SIGNATURE	DATE	SIGNATURE	DATE	SIGNATURE	DATE
<i>[Signature]</i>	8/15	<i>[Signature]</i>	8/15	<i>[Signature]</i>	
PRINTED NAME/COMPANY:		PRINTED NAME/COMPANY:		PRINTED NAME/COMPANY:	

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

☐ Anaheim, California
1250 E. Gene Autry Way
Anaheim, California 92805
(714) 937-1094
(800) 404-2673

☐ Long Beach, California
3700 Cherry Avenue
Long Beach, California 90807
(310) 595-8401
(800) 814-3433

☐ Denver (Aurora), Colorado
10703 E. Bethany Drive
Aurora, Colorado 80014
(303) 751-1780
(800) 972-2673

☐ Casper, Wyoming
420 West 1st Street
Casper, Wyoming 82601
(307) 235-5741
(800) 666-0306

☐ Houston, Texas
8210 Mosely Road
Houston, Texas 77075
(713) 943-9776
(800) 734-2673

☐ Corpus Christi, Texas
1733 North Padre Island Drive
Corpus Christi, Texas 78408
(512) 289-2673
(800) 548-8228

☐ Lake Charles, Louisiana
3645 Begis Parkway
Sulphur, Louisiana 70663
(318) 583-4926
(800) 259-4926

ORIGINAL



CORE LABORATORIES

CHAIN OF CUSTODY RECORD

No. 16492

CUSTOMER INFORMATION				PROJECT INFORMATION				ANALYSIS / METHOD REQUEST				REMARKS / PRECAUTIONS			
COMPANY: OPTERCH				PROJECT NAME/NUMBER: HAYWARD AVE 1315-115				TOTAL LENGTH: 507420				LAB JOB NO. 94987			
SEND REPORT TO: JOHN MORRIS				BILLING INFORMATION				TPH / MPM SW 8015 (0.15/0.15)							
ADDRESS: 4100 NW LOOP 410 #230				BILL TO:				SW 8240 - 624							
SAN ANTONIO TX 78229				ADDRESS: SAME AS LOT 1											
PHONE: 210 731-0000				PO NO.:											
FAX: 210 731-0008															
SAMPLE NO.	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	NUMBER OF CONTAINERS								
1	04-002 MW-B	8/11/94	0919	WATER	VOA VIALS	Y	4								
2	05-003 MW-A		1348												
3	05-003 MW-B		1434												
4	05-002 MW-A		1800												
5	05-002 MW-B		1915												
6	TRAP BLANK			WATER	VOA VIAL	Y	1								
7	05-003 MW-A-Dup	8/11/94	1358	WATER	VOA VIAL	Y	4	Duplicate							
SAMPLER: M. BENJAMIN/R. TONES								SHIPMENT METHOD: FEB-04							
REQUIRED TURNAROUND: SAME DAY 24 HOURS 48 HOURS 72 HOURS 5 DAYS 10 DAYS ROUTINE OTHER								AIRBILL NO.: 5035 CONTRACT							
1. RELINQUISHED BY: SIGNATURE: M. Benjamin				DATE: 8/11/94				3. RELINQUISHED BY: SIGNATURE:				DATE:			
PRINTED NAME/COMPANY: M. Benjamin				TIME: 1:30				PRINTED NAME/COMPANY:				TIME:			
1. RECEIVED BY: SIGNATURE: [Signature]				DATE: 8/12/94				3. RECEIVED BY: SIGNATURE:				DATE:			
PRINTED NAME/COMPANY: [Signature]				TIME: 1:30				PRINTED NAME/COMPANY:				TIME:			

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

- ☒ Anaheim, California
1250 E. C. e Autry Way
Anaheim, California 92805
(714) 937-1094
(800) 404-2673
- ☐ Long Beach, California
3700 Cherry Avenue
Long Beach, California 90807
(310) 595-8401
(800) 814-3433
- ☐ Denver (Aurora), Colorado
10703 E. Berthany Drive
Aurora, Colorado 80014
(303) 751-1780
(800) 972-2673
- ☐ Casper, Wyoming
420 West 1st Street
Casper, Wyoming 82601
(307) 235-5741
(800) 666-0206
- ☐ Houston, Texas
8210 Mosely Road
Houston, Texas 77075
(713) 943-9776
(800) 734-2673
- ☐ Corpus Christi, Texas
1733 North Padre Island Drive
Corpus Christi, Texas 78408
(512) 289-2673
(800) 548-8228
- ☐ Lake Charles, Louisiana
3645 Begis Parkway
Sulphur, Louisiana 70663
(318) 583-4326
(800) 259-4926

**WESTERN
ATLAS**

CORE LABORATORIES

CHAIN OF CUSTODY RECORD

[illegible]

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

Lake Charles, Louisiana
3645 Beglis Parkway
Sulphur, Louisiana 70663
(318) 583-4926
(800) 259-4926

Corpus Christi, Texas
1733 North Padre Island Drive
Corpus Christi, Texas 78408
(512) 289-2673
(800) 548-8228

Houston, Texas
3210 Mosely Road
Houston, Texas 77075
713/943-9776
(800) 734-2673

Casper, Wyoming
420 West 1st Street
Casper, Wyoming 82601
(307) 235-5741
(800) 666-0306

Denver (Aurora), Colorado
10703 E. Bethany Drive
Aurora, Colorado 80014
(303) 751-1780
(800) 972-2673

Long Beach, California
700 Cherry Avenue
Long Beach, California 90807
(213) 595-8401
(213) 814-3433

Anaheim, California
250 E. Gene Autry Way
Anaheim, California 92805
(714) 937-1094
(800) 404-2673

ORIGINAL

[illegible]

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

Anaheim, California
1250 E. Gene Autry
Anaheim, California
(714) 937-1094
(800) 404-2673

☐ Long Beach, California
3700 Cherry Avenue
Long Beach, California
(310) 595-8401
(800) 814-3433

Denver (Aurora)
10703 E. Bethan
Aurora, Colorado
(303) 751-1780
(800) 972-2673

☐ **Casper, Wyoming**
420 West 1st Street
Casper, Wyoming
(307) 235-5741
(800) 666-0306

☐ **Houston, Texas**
8210 Mosely Road
Houston, Texas 77075
(713) 943-9776
(800) 734-2673

Corpus Christi, Texas
1733 North Padre Island Drive
Corpus Christi, Texas 78408
(512) 289-2673
(800) 548-8228

Lake Charles, Louisiana
3645 Beglis Parkway
Sulphur, Louisiana 70666
(318) 583-4926
(800) 259-4928

WESTERN ATLAS CORE LABORATORIES CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION				PROJECT INFORMATION				ANALYSIS / METHOD REQUEST		NUMBER OF CONTAINERS		REMARKS / PRECAUTIONS	
COMPANY: OPTRECH				PROJECT NAME/NUMBER: HAYWARD AVE 1315-115				TPH / MCD 8015		TOTAL LBS 7420		LAB JOB NO. 94953	
SEND REPORT TO: JOHN MORRIS				BILLING INFORMATION				UAH / SW 82410					
ADDRESS: 4100 NW LOOP 410 #230				BILL TO: OPTRECH									
SAN ANTONIO TX 78229				ADDRESS: 4100 NW LOOP 410 #230									
PHONE: 210 731-0000				PHONE: 210 731-0000									
FAX: 210 731-0008				FAX: 210 731-0008									
SAMPLE NO.	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.							
1	05-001R-BH 1.5'	8/6/94	835	SOIL	STAINLESS ST. SLEEVES	N							
2	05-001R-BH 11.5'		906										
3	05-001R-BH 11.5' Dup		910										
4	05-001R-BH 14-15.5'		927										
5	05-002R-BH 2'		1038										
6	05-002R-BH 11'		1058										
7	05-002R-BH 15'		1114										
8	05-003R-BH 1.5'		1157										
9	05-003R-BH 11'		1226										
10	05-003R-BH 15'		1229										
SHIPMENT METHOD: FPD-EX												AIRBILL NO.:	
REQUIRED TURNAROUND: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HOURS <input type="checkbox"/> 48 HOURS <input type="checkbox"/> 72 HOURS <input type="checkbox"/> 5 DAYS <input type="checkbox"/> 10 DAYS <input type="checkbox"/> ROUTINE <input type="checkbox"/> OTHER												SEE CONTRACT	
1. RELINQUISHED BY: SIGNATURE: [Signature]				2. RELINQUISHED BY: SIGNATURE: [Signature]				3. RELINQUISHED BY: SIGNATURE: [Signature]		DATE		DATE	
PRINTED NAME/COMPANY: OPTRECH				PRINTED NAME/COMPANY: [Signature]				PRINTED NAME/COMPANY: [Signature]		TIME		TIME	
1. RECEIVED BY: SIGNATURE: [Signature]				2. RECEIVED BY: SIGNATURE: [Signature]				3. RECEIVED BY: SIGNATURE: [Signature]		DATE		DATE	
PRINTED NAME/COMPANY: [Signature]				PRINTED NAME/COMPANY: [Signature]				PRINTED NAME/COMPANY: [Signature]		TIME		TIME	

* FLUSH TURNAROUND MAY REQUIRE SURCHARGE

☒ Anaheim, California 1250 E. Gene Autry Way Anaheim, California 92805 (714) 937-1094 (800) 404-2673

☐ Long Beach, California 3700 Cherry Avenue Long Beach, California 90807 (310) 595-8401 (800) 814-3433

☐ Denver (Aurora), Colorado 10703 E. Bethany Drive Aurora, Colorado 80014 (303) 751-1780 (800) 972-2673

☐ Casper, Wyoming 420 West 1st Street Casper, Wyoming 82601 (307) 235-5741 (800) 666-0603

☐ Houston, Texas 8210 Mossley Road Houston, Texas 77075 (713) 943-9776 (800) 734-2673

☐ Corpus Christi, Texas 1733 North Padre Island Drive Corpus Christi, Texas 78408 (612) 289-2673 (800) 548-8228

☐ Lake Charles, Louisiana 3645 Beglis Parkway Sulphur, Louisiana 70663 (318) 583-4926 (800) 259-4926

WESTERN ATLAS CORE LABORATORIES

CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION				PROJECT INFORMATION			
COMPANY: OPTech		PROJECT NAME/NUMBER: HAYWARD ANG 135-115		BILL TO: OPTech		BILLING INFORMATION	
SEND REPORT TO: JOHN MORRIS		BILL TO: OPTech		ADDRESS: 4100 NW LOOP 410 #230		ADDRESS: 4100 NW LOOP 410 #230	
ADDRESS: 4100 NW LOOP 410 #230		ADDRESS: 4100 NW LOOP 410 #230		PHONE: 787799		PHONE: 787799	
PHONE: (210) 731-0000		PHONE: (210) 731-0000		FAX: (210) 731-0008		FAX: (210) 731-0008	
FAX: (210) 731-0008		FAX: (210) 731-0008		PO NO.: 210731-0008		PO NO.: 210731-0008	
SAMPLE NO.	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	ANALYSIS / METHOD REQUEST
1	05-005BH RE 1.5'	8/5/94	1610	SOILS	STAINLESS ST. SIEVES	N	TPH / Mod 815
2,3,4	05-005BH RE 6.5'-8'	1630	1615	WATER	500 mL / 400 mL PLASTIC / UGA	Y	TPH / Mod 815
5	05-005BH RE 6'						ms/msd
6	05-005BH RE 11.5'						ms/msd
7	05-005BH RE 11.5' Dup						Duplicate
8	FB-1	1700	1700	WATER	500 mL / 400 mL PLASTIC / UGA	Y	* per worksheet
9	EB-5	1700	1700	WATER	500 mL / 400 mL PLASTIC / UGA	Y	
10	TRIP BLANK	-	-	WATER	400 mL UGA	Y	

SHIPPING METHOD: FORD - EX		AIRBILL NO.: SEE CONTRACT	
REQUIRED TURNAROUND:	SAME DAY	24 HOURS	48 HOURS
1. RELINQUISHED BY:	SIGNATURE: [Signature]	DATE: 5/8/94	TIME: 1800
PRINTED NAME/COMPANY:	OPTech	DATE: 6/8/94	TIME: 1140M
2. RECEIVED BY:	SIGNATURE: [Signature]	DATE: 6/8/94	TIME: 1140M
PRINTED NAME/COMPANY:	Im Scott Core	DATE: 6/8/94	TIME: 1140M

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

☒ Anaheim, California
1250 E. Gene Autry Way
Anaheim, California 92805
(714) 937-1094
(800) 404-2673

☐ Long Beach, California
3700 Cherry Avenue
Long Beach, California 90807
(310) 595-8401
(800) 814-3433

☐ Denver (Aurora), Colorado
10703 E. Bethany Drive
Aurora, Colorado 80014
(303) 751-1780
(800) 972-2673

☐ Casper, Wyoming
420 West 1st Street
Casper, Wyoming 82601
(307) 235-5741
(800) 666-0306

☐ Houston, Texas
8210 Mossy Road
Houston, Texas 77075
(713) 943-9776
(800) 734-2673

☐ Corpus Christi, Texas
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(318) 583-4926
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ORIGINAL



CORE LABORATORIES, INC.

No. 24305

CHAIN OF CUSTODY RECORD

1 of 2

CUSTOMER INFORMATION				PROJECT INFORMATION				ANALYSIS / METHOD REQUEST				REMARKS / PRECAUTIONS			
COMPANY: OPTech				PROJECT NAME/NUMBER: 1315-115				LAB JOB NO. 043120							
SEND REPORT TO: Jeff Blunt				BILLING INFORMATION											
ADDRESS: 4100 NW Loop 410, #230				BILL TO: Same											
SAN Antonio, TX 78229				ADDRESS:											
PHONE: (210) 731-0000				PHONE:											
FAX: (210) 731-0008				FAX:											
PO NO.:															
SAMPLE NO.	SAMPLE ID/DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRESERV.	NUMBER OF CONTAINERS								
1	B61-001 MW	7 Dec 94	0716	H ₂ O	1-PLASTIC		5	VOC - 624							
2	04-001 MW	"	0750	"	3-VGA		5	TPH-D-8015 Med (1-L Amp)							
3	04-002 MW	"	0822	"	1-AMADE glass		5	TPH-D-8015 Med (1-L Amp)							
4	04-002 MW - dup	"	0835	"	"		5	TPH-D-8015 Med (1-L Amp)							
5	Field Blank	"	0857	"	"		5	TPH-D-8015 Med (1-L Amp)							
6	EP Blank	"	0903	"	"		5	TPH-D-8015 Med (1-L Amp)							
7	Trip Blank	"	"	"	"		3	TPH-D-8015 Med (1-L Amp)							
								SHIPMENT METHOD: FEDEX							
SAMPLER: R. Castillo, J. Byrd								AIRBILL NO.: 2693755831							
REQUIRED TURNAROUND: SAME DAY								ROUTINE OTHER							
1. RELINQUISHED BY: SIGNATURE: J. Byrd								DATE: 7 Dec 94							
PRINTED NAME/COMPANY: J. Byrd								SIGNATURE: J. Byrd							
2. RECEIVED BY: SIGNATURE: J. Byrd								DATE: 7 Dec 94							
PRINTED NAME/COMPANY: J. Byrd								SIGNATURE: J. Byrd							
3. RECEIVED BY: SIGNATURE: J. Byrd								DATE: 7 Dec 94							
PRINTED NAME/COMPANY: J. Byrd								SIGNATURE: J. Byrd							

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

☒ Anaheim, California
7250 E. Gene Autry Way
Anaheim, California 92805
(714) 937-1094
(800) 404-2673

☐ Long Beach, California
3700 Cherry Avenue
Long Beach, California 90807
(310) 595-8401
(800) 814-3433

☐ Denver (Aurora), Colorado
10703 E. Berthany Drive
Aurora, Colorado 80014
(303) 751-1780
(800) 972-2673

☐ Casper, Wyoming
420 West 1st Street
Casper, Wyoming 82601
(307) 235-5741
(800) 666-0306

☐ Houston, Texas
8210 Mosley Road
Houston, Texas 77075
(713) 943-9776
(800) 734-2673

☐ Corpus Christi, Texas
1733 North Padre Island Drive
Corpus Christi, Texas 78408
(512) 289-2673
(800) 548-0228

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3645 Begis Parkway
Sulphur, Louisiana 70663
(318) 583-4976
(800) 244-4928

CHAIN OF CUSTODY RECORD

2022

[illegible]

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Anaheim, California 92805
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10703 E. Bethany Drive
Aurora, Colorado 80014
(303) 751-1780
(800) 972-2673

Casper, Wyoming
420 West 1st Street
Casper, Wyoming 82601
(307) 235-5741
(800) 666-0306

Houston, Texas
8210 Mosley Road
Houston, Texas 77075
(713) 943-9776
(800) 734-2673

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(800) 548 8228

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3645 Beglis Parkway
Sulphur, Louisiana 70663
(318) 583-4926
(800) 259-4926



CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION				PROJECT INFORMATION				ANALYSIS / METHOD REQUEST				REMARKS / PRECAUTIONS			
COMPANY: Operational Technologies				PROJECT NAME/NUMBER: 1315-189				LAB JOB NO. 953596							
SEND REPORT TO: Attn: Jeff Blunt				BILLING INFORMATION											
ADDRESS: 4100 NW Loop 410				BILL TO: Operational Technologies											
City: San Antonio TX 78229				ADDRESS: 4100 NW Loop 410											
PHONE: 210 (731-0000)				PHONE: 210 (731-0000)											
FAX: 210 (731-0008)				FAX: 210 (731-0008)											
SAMPLE NO.	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRESERV.	NUMBER OF CONTAINERS	ANALYSIS / METHOD REQUEST				REMARKS / PRECAUTIONS			
1	1207 TB	12/5/95	12:55	H2O	Vials	REF	2	✓	✓	✓	✓	✓	✓	✓	Attn: Lance Bell
2	1207 FB	12/7/95	0900	H2O	Vials	HCL	2	✓	✓	✓	✓	✓	✓	✓	Field Dup will be run on
3	1207 EB	12/7/95	0855	H2O	Vials	HCL	2	✓	✓	✓	✓	✓	✓	✓	05-002 Dup.
4	05-002 MW	12/7/95	0910	H2O	Vials/Plastic Containers	REF	3	✓	✓	✓	✓	✓	✓	✓	
5	05-002 MW	12/7/95	0910	H2O	Vials/Plastic Containers	REF	3	✓	✓	✓	✓	✓	✓	✓	
6	05-003 MW	12/7/95	1020	H2O	Vials/Plastic Containers	REF	4	✓	✓	✓	✓	✓	✓	✓	
7	05-001 MW	12/7/95	1115	H2O	Vials/Plastic Containers	REF	4	✓	✓	✓	✓	✓	✓	✓	

SHIPMENT METHOD: Fed Express		AIRBILL NO.: 723 641 8980									
REQUIRED TURNAROUND*	SAME DAY	24 HOURS	48 HOURS	72 HOURS	5 DAYS	10 DAYS	ROUTINE	OTHER			
SAMPLER	Rudy Arredondo						✓				
1. RELINQUISHED BY: Rudy Arredondo		DATE: 12/7/95		2. RELINQUISHED BY: Rudy Arredondo		DATE: 12/7/95		3. RELINQUISHED BY: Rudy Arredondo		DATE: 12/7/95	
SIGNATURE: Rudy Arredondo		TIME: 12:00		SIGNATURE: Rudy Arredondo		TIME: 12:00		SIGNATURE: Rudy Arredondo		TIME: 12:00	
PRINTED NAME/COMPANY: Rudy Arredondo / ORTECH		PRINTED NAME/COMPANY: Rudy Arredondo / ORTECH		PRINTED NAME/COMPANY: Rudy Arredondo / ORTECH		PRINTED NAME/COMPANY: Rudy Arredondo / ORTECH		PRINTED NAME/COMPANY: Rudy Arredondo / ORTECH		PRINTED NAME/COMPANY: Rudy Arredondo / ORTECH	
1. RECEIVED BY: Rudy Arredondo		DATE: 12/7/95		2. RECEIVED BY: Rudy Arredondo		DATE: 12/7/95		3. RECEIVED BY: Rudy Arredondo		DATE: 12/7/95	
SIGNATURE: Rudy Arredondo		TIME: 12:00		SIGNATURE: Rudy Arredondo		TIME: 12:00		SIGNATURE: Rudy Arredondo		TIME: 12:00	
PRINTED NAME/COMPANY: Rudy Arredondo		PRINTED NAME/COMPANY: Rudy Arredondo		PRINTED NAME/COMPANY: Rudy Arredondo		PRINTED NAME/COMPANY: Rudy Arredondo		PRINTED NAME/COMPANY: Rudy Arredondo		PRINTED NAME/COMPANY: Rudy Arredondo	

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(800) 972 2673

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Houston, Texas 77075
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(800) 734 2673

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